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# The BOY TRAVELLERS.

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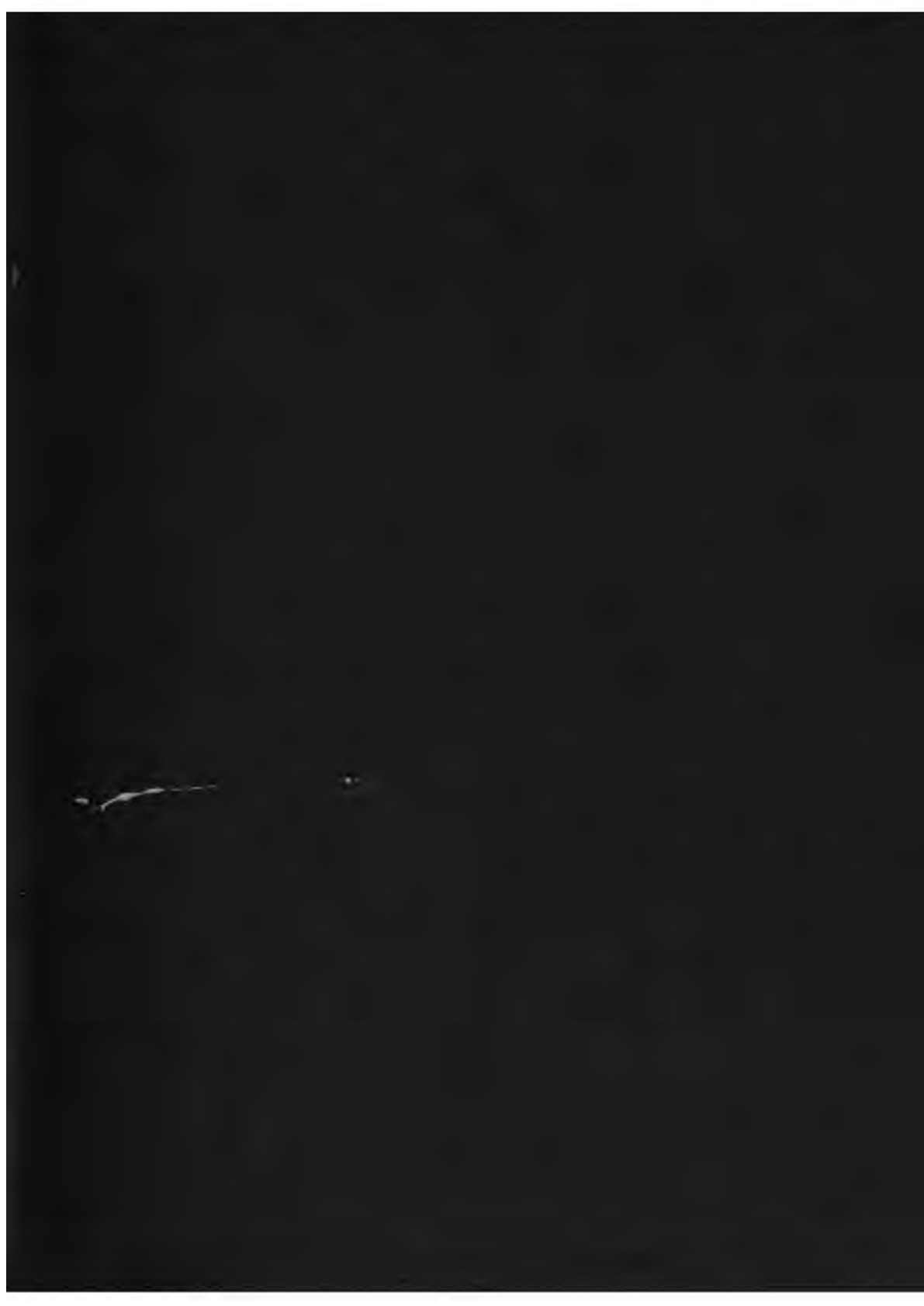
Sarah Orne Jewett  
AT SOUTH BERWICK, MAINE

BEQUEATHED BY

Theodore Jewett Eastman

A.B. 1901 - M.D. 1905

1931







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THE BOY TRAVELLERS IN THE FAR EAST

*PART SECOND*

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ADVENTURES OF TWO YOUTHS IN A JOURNEY

TO

SIAM AND JAVA

WITH DESCRIPTIONS OF COCHIN-CHINA, CAMBODIA, SUMATRA  
AND THE MALAY ARCHIPELAGO

BY

THOMAS W. KNOX

AUTHOR OF "CAMP-FIRE AND COTTON-FIELD" "OVERLAND THROUGH ASIA"  
"UNDERGROUND" "JOHN" ETC.

**Illustrated**

NEW YORK

HARPER & BROTHERS, FRANKLIN SQUARE

1882



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## PREFACE.

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**T**HE favorable reception accorded to "The Boy Travellers in Japan and China" has led to the preparation of the present book.

Frank and Fred have continued their journey under the guidance of Doctor Bronson, and the plan of their travels and observation is identical with the one they followed through the Celestial Empire and the Land of the Mikado. The incidents in the narrative were mainly the experiences of the author at a recent date; and the descriptions of countries, cities, temples, people, manners, and customs are nearly all from his personal observations and notes. He has endeavored to give a faithful account of Siam, Java, and the adjacent countries as they appear to-day, and trusts that the only fiction of the book is in the names of the individuals who tell the story.

In a few instances the narrative has been slightly interrupted, in order to introduce matters of general interest to young readers. The details of the progress of naval architecture and the accounts of submarine operations, together with the wonderful adventures of Marco Polo, may be classed as digressions. It is hoped they will meet the same welcome that was accorded to the episode of a whaling voyage in the first record of the travels of Frank and Fred.

The publishers have kindly allowed the use of some illustrations that have already appeared in their publications relative to the Far East, in addition to those specially prepared for this volume. The author has consulted the works of previous travellers in the East to supplement his own information, and to some of them he is under obligations. Especially is he indebted to Mr. Frank Vincent, Jr., author of that excellent

and well-known book, "The Land of the White Elephant," not only for details respecting Cambodia and adjacent regions, but for some of the admirable engravings that adorn his volume. Other authorities are credited with the text of their work or in foot-notes to the pages where quotations are made.

The author is not aware that any book describing Siam, Java, Cochin China, Cambodia, and the Malay Archipelago, and especially addressed to the young, has yet appeared. Consequently he hopes that this volume will meet with as warm a welcome as was given to "The Boy Travellers in Japan and China," by adult as well as juvenile members of many families throughout the United States.

T. W. K.

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Flat &amp; Co. N. Y.

# THE BOY TRAVELLERS

IN

## THE FAR EAST.

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### CHAPTER I.

#### DEPARTURE FROM HONG-KONG.

“**T**HERE she comes!” shouted Frank Bassett, as he pointed away to the eastward.

Doctor Bronson and his nephew Fred were standing close beside Frank, and their eyes eagerly followed the direction of his hand.

“Yes, there she is!” Fred responded; “what a splendid sight!”



HONG-KONG, FROM KELLET'S ISLAND.

They were on the lookout platform on Victoria Peak, 1800 feet above the harbor of Hong-kong. The city, the island, the surrounding waters, and the neighboring coast of China all lay before them like a map. They had been studying the scene, and the Doctor had explained to the boys its remarkable resemblance to the view from the summit of the Rock of Gibraltar.

Their geographical observations were interrupted by the announcement of the sergeant in charge of the signal-station that the Pacific Mail steamer *City of Peking* was just outside the harbor, and would shortly enter through the Ly-ee-moon Pass. Hong-kong harbor has two entrances; the one to the eastward is known as the Ly-ee-moon, while that to the west is called the Lama Passage. Both are easy of navigation, and admit ships of the largest class to one of the finest harbors in the world.

The great steamer ploughed steadily forward; and as she passed Kellet's Island, which is a fortified rock near the Ly-ee-moon, she turned gracefully, and headed straight for her anchorage. Our friends watched her till she came to her resting-place, and her engines had ceased working; then they said good-bye to the signal-station, and proceeded to the sedan-chairs which were waiting for them. The chair-coolies had also seen the steamer, and, as they were anxious to reach the city before the passengers could come ashore, they made the best possible time on their way down the mountain. They ran rather than walked, and two or three times the boys narrowly escaped a fall in the sudden bends of the zigzag road.

The adventures of Doctor Bronson, Frank Bassett, and Fred Bronson, and their reasons for being in Hong-kong, have been narrated in a previous volume.\*

They expected the *City of Peking* to bring letters that would determine their future movements. Is it any wonder they were in a hurry to have her mails landed, and the precious letters delivered?

Their letters were addressed in care of the banking-house on which their credits were drawn, and very naturally the boys were eager to go at once to that establishment. The Doctor suggested that it would be quite time enough to go there after lunch; and, as the appetites of the trio had been sharpened by the excursion up the mountain, the proposal met no opposition whatever.

The meal was served in the dining-room of the hotel, and as soon as it was ended the party walked leisurely to the banking-house. In a little while their letters were handed to them, and greatly rejoiced were the boys at the arrival of these precious missives from home. The return to the hotel was a rapid one on the part of the youths, who left the good Doctor far behind, in their eagerness to be once more in their rooms, where they could be safe from interruption while they read the messages from their friends.

---

\* "The Boy Travellers in the Far East. Adventures of Two Youths in a Journey to Japan and China." By Thomas W. Knox. Published by Harper & Brothers, New York, 1880.

The letters were full of good news.

The parents of both the boys expressed their delight at the good use which Frank and Fred had made of their time, and the interesting accounts they had given of their experiences in Japan and China, and their voyage over the Pacific Ocean. Mary and Miss Effie had received



MARY AND EFFIE READING FRANK'S LETTER.

the presents which Frank bought for them in Japan, and Mary confessed in her letter that since the arrival of the precious box they had thought and talked of nothing else. They had dressed themselves in Japanese garments, and Miss Effie was sure that, if their eyes were properly sloped at the corners, they could readily pass for residents of Tokio or Kioto.

The Doctor reached the hotel while they were in the midst of their reading. His package of letters was quite as large as that of either of the boys, and among them there was a very portly letter, which had required a liberal amount of stamps to pay for its transportation. This he opened first, and, after perusing it carefully, he smiled, and laid it aside. Evidently the contents were pleasing.

Frank and Fred were through with their letters about the same time, and as soon as they were at liberty they began comparing notes. Both were a good deal disappointed, as they had received no indication of their future course. Would they go directly back across the Pacific Ocean, or would they proceed on a journey around the world? Perhaps the Doctor could tell them; but just then he was occupied, and they did not wish to disturb him.

There was a rap at the door, followed by the entrance of a servant bringing a letter, which had been overlooked at the banker's. It was for Mr. Frank Bassett; and that young gentleman was not long in breaking the seal and possessing himself of its contents.

His air of melancholy changed to one of delight. He threw his arms around Fred, and made a start in the direction of the Doctor, as if intending to favor him with an embrace, but speedily checked himself, and confined his demonstrations to a quiet leap over a chair that stood in the middle of the room; then he held out the letter for Fred to read.

Fred's delight at the intelligence conveyed in the document was quite equal to Frank's. The question was settled; they were to continue on their journey around the world. The necessary letters of credit would be sent in care of Doctor Bronson, and should be in the mail brought by the *City of Peking*.

Frank saw the large letter on the table in front of the Doctor, and at once divined that it was the important missive containing papers similar to the one with which he was provided before he left home. There was yet a goodly amount remaining on his letter of credit, but not enough to carry him to America by way of Europe. Fred was in a similar predicament, and therefore a permission to go forward would be of no great use if unaccompanied by the necessary cash or its equivalent.

Doctor Bronson relieved their doubt by handing them the letters of credit which had come in the bulky parcel in question. They were considered too valuable to be intrusted to the ordinary mail, and therefore they had been "registered." And from their experience with the Post-office in China and other Eastern countries, our three friends were unanimously of the opinion that all valuable letters going there should be

sent by registered post. The Japanese postal service was the most perfect one they found in their travels, and the Doctor declared that some of our officials at home might learn what would be to their advantage if they would visit the post-office at Yokohama and see how admirably it was conducted.

"Well, boys," said Dr. Bronson, "it's all settled."

The boys had a moment of standing on tiptoe in their exuberant delight, and then Frank asked,

"Where are we to go, Doctor, and when are we to start?"

"That is what we must determine now," was the reply. "We have several routes open to us, and each has its advantages."

"I think," answered Frank, "that we could not do better than leave the selection of the route to Doctor Bronson. He has proved such an excellent guide and friend thus far, that we have the most implicit confidence in his judgment, and are quite willing to adopt his suggestions without question."

This was said as if Frank had been addressing himself to his cousin rather than the Doctor. Fred instantly accepted the proposal, and it was promptly agreed that the whole matter should be left in Doctor Bronson's hands to arrange. The latter thanked the youths for the expression of their confidence in him, and then proceeded to designate on the map the routes leading westward from Hong-kong.

"The regular mail steamers," said he, "go from here to Singapore, which you see is down close to the equator, and at the entrance of the Straits of Malacca. The English steamers go directly there without stopping; but the French ones touch at Saigon, in Cochin China, which is a colony of the French Government."

"I have thought out a plan," he continued, "while we have been waiting, and what I propose is this:

"We will go from here to Saigon by one of the French ships, and then make a stay in Cochin China long enough to see what we wish of the country. Then we can find a trading-ship of some kind to take us to Siam, and once there, we shall have no trouble in getting to Singapore, as there is a regular line between that city and Bangkok, the capital of Siam. There is much to be seen in Siam, as well as in Cochin China; and I think this route will be far preferable to the direct one by the mail steamers, though it will not be so comfortable. We must be prepared to "rough it" a little both on shore and at sea, but our privations will be more than compensated by the abundance of interesting sights on the way.



The boys agreed at once to the proposal, and the conversation came to an end. The Doctor went to arrange for the proposed journey, and the youths brought out their writing materials, and devoted the rest of the afternoon to the preparation of letters in answer to those they had just received.

The French steamer arrived from Shanghai in the evening, and her great hull loomed majestically in the light of the full-moon as she came



ARRIVAL OF THE FRENCH MAIL STEAMER.

to anchor. It is a condition of the contracts for the transportation of the mails, that a steamer is not to lie more than twenty-four hours at any of the stopping-places along the route unless detained by unforeseen accidents. Consequently, when one of these ships arrives, it is pretty certain that her departure will occur within the time above specified; and it was shortly announced that the ship in question would leave at noon the next day. The mail service between Europe and the

Far East is performed almost as regularly as that across the Atlantic, and the arrivals at the various points can be guessed with tolerable accuracy. The English and French steamers perform each a fortnightly service both ways, and, as they run alternately, the residents of China and Japan have weekly mail-days for sending and receiving their letters.

Doctor Bronson engaged passage for the party by the French steamer as far as Saigon, and then went to the office of the "Yuen Fat Hong" to ascertain if there was a vessel for Bangkok by way of Cochin China.

In the last few years the Chinese merchants have gone somewhat extensively into the business of running steamships. There is a company with a capital of two million dollars that owns several lines of steamers along the coast and on the great river of China, the Yang-tse-kiang, and its officers and stockholders are all of them Chinese. There are several smaller companies, and there are Chinese commission-houses that act as agents for English and other steamers in the Eastern trade. The Yuen Fat Hong was one of these commission-houses, and it managed the business of a line of English ships running between Hong-kong and Bangkok, with an occasional call at Saigon.

Doctor Bronson found the office without any difficulty, and was shown into a neatly-arranged parlor, where four well-dressed Chinese were sitting. Three of them were holding fans in their hands, while the fourth was indulging in the luxury of a pipe. Plants in pots stood near the walls, and there was a table in the centre of the room, where the oldest and most serious of the Oriental gentlemen was seated. Evidently it was a time of relief from labor, and so there was no delay in attending to the inquiries of the Doctor.

The information he obtained was entirely satisfactory. The house was to send a ship in a week or ten days to Bangkok by way of Saigon; it would stop two or three days in the latter port, and if the party would be satisfied with the limited accommodations, they could secure passage from there to Siam.

It was secured at once, and then the Doctor returned to the hotel.

The next morning the boys were up early; and long before the hour fixed for their departure from the hotel they had all their baggage in readiness. The trunks and valises were delivered to the porters and carried to the landing-place, whence they were to be transported in a small boat to the great steamer that lay smoking in the harbor. The boat that the party engaged was a reminder of Canton, as it was occupied by an entire family; two or three children were quietly seated in





PRIVATE PARLOR OF THE "YUEN FAT HONG."

a sort of box at the stern, and the crew consisted of two women and a man. One of the women was evidently captain; at least Frank thought so, when he observed her air of authority in giving directions for the movement of the boat. The harbor service of Hong-kong is nearly all performed by Chinese from the famous boat-population of Canton; they are not forbidden to live on shore as they are at Canton, but from long habit, and also from motives of economy, they continue to make their homes on the boats.

While on the way to the ship, Fred made a sketch of the younger of the two women, and declared his intention of sending it home. She was rather light in complexion for an inhabitant of Southern China; her hair was covered by a thick kerchief, tied in a knot under her chin, and her jacket or blouse was buttoned in front, and hung loosely down like a silk wrapper. As soon as she discovered that she was the subject of a sketch she put on her sweetest smile, and was evidently proud of the honor that Fred was showing her.

Less than an hour after they reached the ship they were under way for Saigon.

Our friends spent the afternoon on deck, where they had plenty of occupation watching the irregular line of the coast, and observing the play of light and shade on the water. There were but few passengers, so that they had an abundance of room; the weather was delightful, and both Frank and Fred declared that none of their travel by sea up to that time had been more agreeable. They abandoned all ideas of being sea-sick; and when the bell called them to dinner they were promptly in their places at table.

Suddenly Fred turned to his cousin and asked if he was aware that China was the worst country in the world for wheeled vehicles.

Frank said he knew the Celestial Empire was very badly off for means of locomotion, but he was not certain that it was the most unfortunate in this respect.

"It is a great country," said Fred, "and has an enormous population: we are going to Saigon, which is the capital of Cochin China."

"Well," replied Frank, "what has that to do with the matter of wheeled vehicles?"

"Don't you see?" responded Fred, "there is only one coach in China!"



A CHINESE BOATWOMAN.

"That is a very good conundrum," remarked the Doctor, who had been listening to the dialogue between the boys; "but it is as old as it is good. I heard it when I first came to China, years ago."

Fred confessed that he found the conundrum in question in a book on China which he had picked up in Hong-kong, and thereupon it was agreed that no more jokes should be made until they were again on shore.

At an early hour the boys retired to their rooms, and it did not require a long time for them to fall asleep. Fred made no report of any unusual occurrence during his sleeping hours, but it was otherwise with Frank. In the morning he intimated that the letters from home had set him to dreaming, and that all his relatives and friends had congratulated him on his pleasant and prosperous journey. Fred asked if any one had been more profuse in congratulations than any one else, and the young dreamer admitted that such was the case. He mentioned no names, but the Doctor and Fred had no difficulty in determining who that one was.



FRANK'S DREAM.

## CHAPTER II.

## VOYAGE TO SAIGON.—ARRIVAL IN COCHIN CHINA.

THE voyage from Hong-kong to Saigon was neither long nor unpleasant. The weather was fine, and the wind favored the progress of the steamer. The Doctor explained that the north-east monsoon was blowing at that season of the year, and it was to be relied on with such certainty that the steamship companies arranged their time-tables with reference to it. The boys had heard something about the monsoons before this, and Fred determined that he would study the subject sufficiently to have a clear understanding of it. So he questioned the Doctor, and examined all the books he could find that had anything to say about the monsoons, and when he thought his information was complete he proceeded to put it on paper.

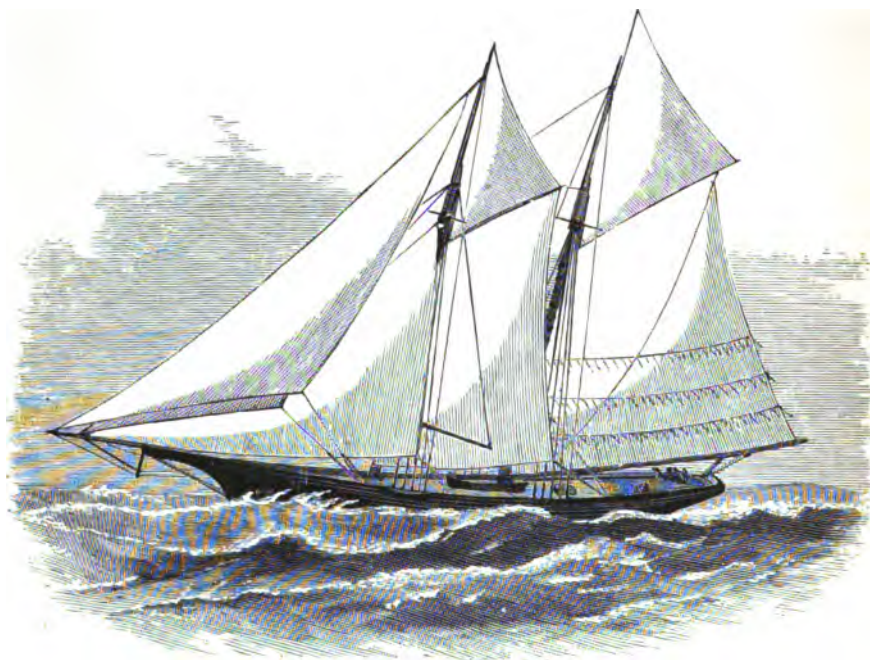


HURRICANE DURING THE CHANGE OF THE MONSOON.

Here is Fred's essay on the winds of the Eastern seas:

"The word 'monsoon' comes from the Arabic *musim*, which means 'season,' and the winds are so called because they blow in alternate seasons, first in one direction and then in the other. On the coast of China

the wind is from the south-west from April to October, and is then called the south-west monsoon; for the other half of the year it blows from



A FAVORING MONSOON.

the north-east, and is then called the north-east monsoon. There is generally a period of about two weeks when the winds are irregular at each change from one monsoon to the other, and at this time the ship-masters are very fearful of severe storms, with heavy rain and much thunder and lightning.

“The monsoon winds are known all over the Eastern seas, from the coast of China to the shores of Arabia. Their periods of blowing are so well understood that the steamship captains know exactly when they may be expected, and their voyages are arranged accordingly. On the printed time-tables of all the steamship companies you will find ‘monsoon allowances;’ and on the coast of India there are certain ports where the ships cannot touch at all when the monsoon is unfavorable. The Peninsular and Oriental Steam Navigation Company allows four days for its ships between Suz and Shanghai when the monsoon is against them, and one day on the voyage between Hong-kong and Yokohama. The French mail steamers have the same allowances. In August, when



the south-west wind is blowing, a steamer goes from Hong-kong to Yokohama in seven days; but in April, when the wind is the other way, she is allowed eight days for the voyage.

“The monsoons are caused just like all other winds—by the heated air rising and cold air rushing in to fill its place. In summer, when the sun is over Asia and the ground becomes heated to a high degree, the air rises, and the cooler air from the south comes to fill up the space. This makes the south-west monsoon; and when the seasons change, and it becomes summer in the southern hemisphere and winter in the northern, then the air goes the other way, and the wind blows from the north-east. This is the north-east monsoon.

“The monsoons should not be mistaken for the trade-winds which blow in the Atlantic and Pacific oceans, and also in the southern part of the Indian Ocean. The monsoons change every half year, as I have explained, but the trade-winds blow regularly all the year round in the same direction. They are caused by the warm air rising from the vicinity of the equator, owing to the great heat, and the cool air rushing in from the south and from the north. The trade-winds have been so named because they have been of great assistance to commerce; sailing-



RUNNING BEFORE THE TRADE-WIND.

ships can calculate their voyages with great accuracy by means of these winds, and I have read and heard of ships in the trade-winds that sailed for twenty or thirty days without moving a rope or altering the position of a sail. They went along ten or twelve miles an hour, and the sailors had nothing to do but lie around the deck or in the fore-castle, and amuse themselves in any way they liked."

Fred read his production to the Doctor and Frank as they sat on deck, the second day of the voyage from Hong-kong. Frank wanted a copy, but took the precaution to ask the Doctor if it was all correct. The latter said it was entirely, so far as he knew, but it did not tell the whole story. Thereupon Frank set at work to find something additional, and in the course of an hour or so he offered the following post-script to the essay of his cousin :

"In studying about the trade-winds and the monsoons, I find that they do not blow directly north or directly south, as we might suppose they would if they came in to fill up the vacancy caused by the rising of the heated air. North of the equator the trade-winds blow from the north-east, and south of it they are from the south-east. The inclination to the east is caused by the rotary motion of the earth from east to west. The earth slips from under the wind while turning on its axis, and it is really the earth that makes the slope of the wind, and not the wind itself. Something like it may be seen when a boat crosses a river. The boatman may try to pull straight across, but if he does so the current carries him down, and he is unable to land opposite his starting-point. The only way he can do so is by going obliquely against the stream.

"The monsoons get their direction in the same way as the trade-winds get theirs; with this difference, that the south-west monsoon starts near the equator, and not in the southern hemisphere, like the south-east trade-wind. The rotary motion of the earth is greater at the equator than it is in the northern latitudes, and so the wind gets a westerly inclination instead of an easterly one, as in the case of the trade-wind. Some of the scientific men say that the north-east monsoon is not a monsoon at all, but only the north-east trade-wind taking its regular course, which has been disturbed by the more powerful wind from the south-west."

"Very good," remarked the Doctor, when Frank read what he had written. "I am a little fearful, however, that it will not be understood by everybody, and so we will drop the dry subject and think of something easier."

The boys admitted that the topic was a dry one, but nevertheless it was interesting; and they thought they would not be doing their duty in their journey if they failed to comprehend the great winds that so materially help or hinder the movements of ships in Asiatic waters.

On their third day from Hong-kong the boys heard with delight that land was visible. At first it was like a dark cloud on the horizon; but, as they approached it, the scene changed, and the cloud was resolved into a tropical shore, backed by a line of hills in the distance. The steamer headed for a little promontory, and by-and-by a light-house was revealed that marked the entrance of the river which they were to ascend.

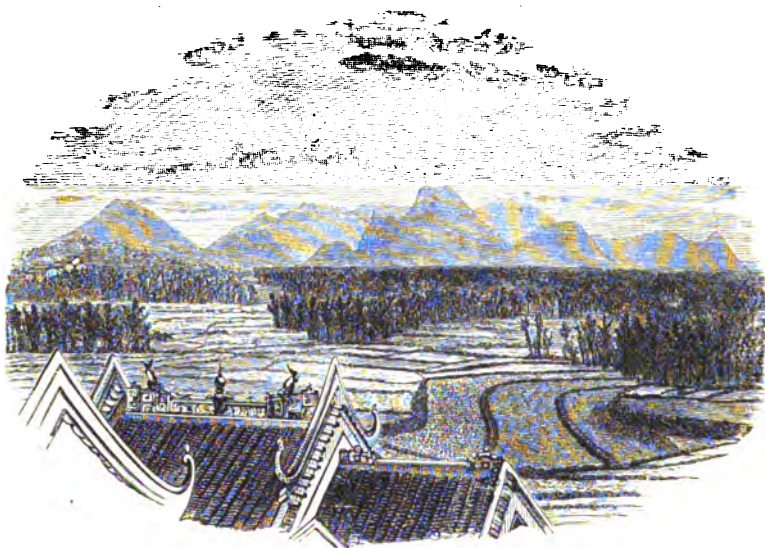
A boat came out from the mouth of the river, and a pilot boarded the steamer. He was a weather-beaten Frenchman, who had lived more than twenty years in Cochin China, and was thoroughly familiar with the channel of the river, or rather of its various channels. The Mekong empties into the China Sea, very much as the Mississippi discharges into the Gulf of Mexico; it has several mouths, and the whole lower part of its course is divided into canals and bayous, that are very convenient for the natives in the matter of local navigation.

Saigon, the destination of the steamer and of our friends, is on one of these lower branches of the Mekong, about thirty miles from the sea. The river is not more than five or six hundred feet wide, and the channel is very crooked. The boys were reminded of their trip up the Peiho, from Taku to Tien-Tsin, when they were on their way to Peking, but they voted that the present voyage was the more agreeable of the two, inasmuch as the steamer did not follow the example of their ship on the Peiho, by occasionally running her nose into the bank. Their progress was steady but slow, and they had plenty of time to study the scenery of the new country they were entering.

On both banks of the river the land is quite flat, and they were told that, in times of unusual freshets, it was overflowed for long distances. For this reason, it is not very thickly populated, although the soil is rich, and could be made to produce abundantly. All along the banks there was a thick fringe of mangrove-trees, and sometimes they appeared to extend over many square miles of land. Here and there were rice-fields that appeared to have the most careful cultivation; and sometimes a village, with its temple rising above the modest dwellings of the inhabitants, was revealed to the eyes of the young wanderers.

The number of the villages increased; and by-and-by a larger collection of houses than they had yet seen was visible. This was the last village before Saigon, and finally the city itself came into view. The





RICE-FIELDS ON THE MEKONG.

steamer stopped in front of it, and hardly was her anchor down before she was surrounded by a crowd of native boats. Some of them were exactly of the model of those at Hong-kong and Canton, and others were new to the eyes of our friends. A great many Chinese have come here from Canton, and brought their manners and customs with them; and they have also brought their boats, or caused the construction of some exactly similar to those they left behind.

As soon as convenient the Doctor engaged a boat for the party, and the three travellers went on shore. There are several hotels at Saigon not far from the landing-place, and it was not long before the strangers were comfortably quartered—at least comfortably for Cochin China. After their experiences at Peking and other places, they were not inclined to be fastidious about their lodgings.

As soon as they had arranged matters at the hotel, the party went out for a stroll. They found Saigon was well laid out, with broad streets that ran straight as sunbeams for long distances. Most of them were macadamized, and shaded with double rows of trees, and they had deep gutters to carry off the heavy rains that fall in this latitude. The boys were greatly interested in observing the hats worn by the natives; those of the men were conical in shape, and came down over the shoulders like an extinguisher over a candle. The women wore hats that resembled baskets, about six inches deep by not less than two feet across. The

hats for both men and women are made of leaves, closely plaited together, and serve to keep off the rain as well as the sun. The hat of the man is particularly useful as an umbrella, as the wearer need only bring it down over his head to make his shelter very nearly complete. When walking on the road, he must keep it well tilted up in front in order to enable him to see his way.

As they walked along, the Doctor explained that the most of the people they met were not the original inhabitants of the country. Saigon was a small fishing-village in 1861, when it was captured by the French and occupied as a military post. The captors determined to make it a city of consequence, and the French government has expended a great deal of money in this endeavor. They have constructed roads and streets on the same scale that the English have adopted at Shanghai, and they have built dock-yards where ships can be repaired. They have maintained a large garrison of soldiers, and several times have been called on to suppress insurrections that cost a great deal of money and blood.

"Now," said the Doctor, "when the French established themselves here, they opened the port for anybody to come and live in Saigon, as they wanted to build up its trade as fast as possible. A great many Chinese came here from Canton and Singapore, and the result was that the place grew very rapidly. The Chinese came much faster than the emigrants from France and other European countries, and also faster than the natives of Cochin China from other parts of the conquered provinces. Consequently, here is a French city with a foreign population greater than the native one, and greater than that from France itself.

"Nearly all the business of Saigon is in the hands of the Chinese," the Doctor continued, "and they have managed to drive out most of the foreigners who were established here. They can live so much more cheaply, and transact business for a smaller profit, that the foreigner cannot compete with them. The number of foreign houses in Saigon is diminishing every year, and it looks as though the Chinese would have it pretty nearly all to themselves by the end of another ten years."

They found some parts of Saigon so much Chinese in character that they seemed to be carried back to Canton or Shanghai. Chinese signs abounded; Chinese shops were open, and the men doing business both behind and before the counters were Chinese. Chinese eyes were upon them, and frequently Chinese peddlers approached them with articles for



A NATIVE WOMAN.





STREET IN THE CHINESE QUARTER.

sale. Chinese were at worship in the temples, walking, talking, trading, and pursuing their ordinary avocations, and for every foreigner the boys encountered they met a hundred inhabitants of the Flowery Kingdom.

The roads were dry and dusty, and after a walk of a couple of hours our friends returned to the hotel. Late in the afternoon they went out again to hear one of the military bands play, and to see the people on their daily promenade. The band plays at a stand on the street parallel

to the river, and everybody who can come out to see and be seen is sure to be there.

Frank found the crowd so variegated that he suggested to Fred that it was like looking through a kaleidoscope. There were Frenchmen, Germans, Englishmen, Spaniards, and Portuguese among the foreigners; while the Asiatics included Chinese, Anamese, Cambodians, Malays, Siamese, and a variety of other nationalities the boys were unable to determine. In fact, they would not have been able to recognize all the people mentioned above if it had not been for the assistance of the Doctor, who was skilled in the study of faces and the sound of languages. Fred thought that the confusion of tongues was enough to give one a faint idea of what the Tower of Babel must have been at the time the builders suspended work.



PLANTS IN THE BOTANICAL GARDEN.

They finished their explorations of the day with a visit to the botanical garden, just as the sun was sinking in the west. The garden contains a good variety of the tropical plants peculiar to the country, and also some that the French have imported, with a view to distributing them through the province in case the cultivation should prove advan-

tageous. There are also some wild animals carefully kept in cages, with the exception of the elephants, which have no greater restriction than being fastened with chains.

The most interesting of these animals, in the eyes of the boys, were some tigers which came from the upper regions of the Mekong River, and were larger than any they had ever seen in America.

The evening was devoted to a study of the geography and history of the country they were in, and before the boys went to bed they had a pretty clear idea of Cochin China and the regions that surround it. In the morn-

ing they complained of numerous visits from the mosquitoes that abound in Saigon the entire year, and are as attentive as the mosquitoes of the United States or any other country.



A NEW ACQUAINTANCE.



A MOSQUITO OF SAIGON.



## CHAPTER III.

## HISTORICAL AND DESCRIPTIVE.—FIRST SIGHTS AND SCENES IN ANAM.

THE boys made a division of labor in looking up information about the country. Frank was to find what he could concerning its natural features and extent, while Fred undertook to learn something about the French occupation, and the reasons that led to it. When they were ready, the essays were read to the Doctor for his approval or rejection; and there was a brief discussion to determine who should be first to read, or rather last, as each preferred not to be the beginner. The Doctor settled the question by deciding that the natural features of the country existed before the French came there, and, therefore, it was the duty of Frank to open the subject.

Thus assured, Frank produced his note-book, and read:

"The countries of Birinah, Siam, and Anam are known to geographers as 'Indo-China,' for the reason that they lie between India and China, and have some of the characteristics of both. The empire of Anam is the one we are now considering, and we will leave the others until we get to them in the course of our travels. It is erroneously called Cochin China, from a province of that name which is included in the empire. The proper divisions of Anam are Cambodia, Tonquin, Tsiampa, and Cochin China, and more than three-fourths of its boundaries are washed by the sea. It is about nine hundred miles long, and its width varies a great deal, owing to the indentations of the coast. Cochin China proper is only some ninety miles long by twenty broad, and it is really the smallest of the provinces. Cambodia is the largest and most populous, and the soil is said to be more productive than that of the other parts of the empire. The number of inhabitants is not known, but it is generally thought to be from twelve to fifteen millions.

"The people resemble the Malays and Chinese, and are sometimes called the connecting link between the two. They are smaller than the Chinese, but not so dark as the Malays; their dress resembles the

Chinese, but they do not shave their heads as the latter do. They are not very ingenious, and have comparatively few manufactures; their chief employments are in agriculture, and they raise a great deal of rice, which is exported to China and other countries. They also export sugar, raw silk, cinnamon, dye-stuff, elephants' hides and bones, together with a good many gums and spices. The dye known as gamboge comes from Cambodia, and the name of the country is said to be derived from this article. On the coast the people engage in fishing, and all through the country the food of the people consists of fish and rice. The natives will eat a great deal when they have the opportunity, but they are able to live on a very small allowance of food when necessity compels them.



NATIVE GENTLEMAN AT SAIGON.

Buddhism is the prevailing religion, but they are not very earnest in it; they have great respect for the dead, and resemble the Chinese in their veneration for their ancestors.

"The country near the coast is generally flat, but farther inland it becomes mountainous. There are tribes in the interior that are more than half savage in their character; they live mostly on wild fruits, and are widely scattered. Some sleep in the trees, and some build small huts, but they rarely have permanent villages, and never get together in great numbers. Sometimes the Cambodians make war on these hill-tribes, and those that they capture are sold as slaves.

"The principal river is the Mekong, and it is one of the largest streams in South-eastern Asia. It rises in China, and has a general course of about one thousand seven hundred miles to the south, and it falls into the sea by several mouths between the ninth and tenth degrees of north latitude. There are many villages and towns along its banks, and in its lower course the river is navigable for the largest ships."



Frank paused, and said that was all he had been able to obtain about Anam, but he hoped to have more by-and-by. The Doctor pronounced his essay an excellent one, as it gave a good general description of the country, and contained the information that every traveller and reader ought to have.

Now it was Fred's turn to read. He had been uneasily twisting his note-book between his fingers, evidently dreading the ordeal of delivery; but as soon as he was through with the first line, his embarrassment vanished, and his voice was as firm as ever.

"Nearly a hundred years ago," said Fred, "France opened relations with Anam, and arranged to give the latter country certain assistance against its enemies in return for commercial and missionary privileges. It was about the time of the famous French Revolution. Only a small part of the promised assistance was given by France, and she was too busy with affairs at home to demand all that had been agreed upon on the part of Anam. The French missionaries were protected in the exercise of their religious duties, and a small trade was carried on until about the year 1831. The old king died, and a new one went on the throne; he was opposed to the French and Spanish missionaries, and endeavored to drive them out of the country. Many of them were killed, and the native Christians were persecuted, so that Christianity threatened to disappear.

"Things went on in this way for twenty years. In 1851 the French determined to interfere, both for the protection of the missionaries and to demand the concessions that were promised when relations were first opened with Anam. Shortly before they came, an order had been issued that all missionaries should be drowned in the river, and any native who concealed, or in any way assisted a missionary, was to be cut in two. The war was a slow one, and the invaders were several times held back by fortifications that had been built by the French engineers who came here in 1795. The persecutions were partially stopped, and in 1857 the French went away.

"New orders against the missionaries were then issued, and more of them were killed. In August, 1858, there was a combined French and Spanish expedition against Anam, which captured the chief seaport and several important places. The war was kept up till 1862, when there was a treaty of peace. This treaty compelled Anam to pay five million dollars to France as compensation for the war, and to promise that every native should be free to adopt any religion that he liked. The missionaries were not to be disturbed, and the principal cities were to be open

VIEW OF THE FRENCH QUARTER OF SAIGON.



to French merchants to trade in whatever they chose to buy and sell. A French Protectorate was established over the province of Cochin China, and afterwards over other provinces, and—”

“Stop a moment,” said the Doctor; “you had better explain what a protectorate is.”

Fred was evidently prepared for the question, as he answered promptly,

“A protector is one who defends or shields from injury. In government matters a protector is a person who has the care of a kingdom during the minority or illness of the king; or it may mean a cardinal or other high official who looks after the interests of a religious body. A protectorate is a government by a protector, or it may be the authority assumed by a superior power over a weaker or a dependent one.

“The case of France and Anam is that the treaty provided that the French should take the management of the affairs of the conquered country, and that the governor-general they sent here should be really the highest officer in the land. The Anamese can do nothing in the way of making and enforcing laws without the consent of the French; in fact, they are exactly in the condition of a colony, and the country where we now are is called the French Colony of Eastern Asia.”

“Quite right,” said the Doctor, when Fred had concluded. “Now we will hear what the French have done in the way of colonization.”

“They have followed their old policy of making no interference with the local laws, except with such as had a character of oppression or cruelty. They required the native authorities to swear to be loyal to France, and when they did so they sustained them until there were complaints that they did not manage affairs properly. In such cases they have investigated the complaints, and done what they thought right in the matter, either by removing or sustaining the official. They have lowered the taxes and established regulations regarding civil marriages, and, on the whole, their presence has been a benefit to the people of Anam. In the matter of marriages they have followed the rule that they long ago adopted in Algeria; a native may be married under the native laws if he likes, and can divorce his wife at a moment’s notice, and without giving any reason; but if he marries her in a French court, he is under French laws, and must abide by them. A great many of the natives of the better class insist upon having their daughters married in the French courts, as they know they will be better treated than under the old system.

“Several times there have been insurrections against the French,

and some of them have cost a great deal of money and fighting. But they have always resulted in victories for the French, and in the addition of new provinces to the territory under their control. At present they have a protectorate over more than half of the peninsula; some of the smaller provinces in the North are nominally independent, while in some portions of the country held by the French the natives do very little more for the foreign government than pay a small tax to it every year.

"The population of the country under the French protectorate is said to be not far from four millions. There is an army of ten or twelve thousand men, of whom nearly if not quite half are natives. The natives are said to make good soldiers, particularly in the artillery. A great part of the garrison duty in the forts on the coast and in the interior is performed by the native troops, and they are said to get along very well with the French. In Cambodia many of the soldiers are from Manila, as they are considered more warlike, and besides the king says it is cheaper to hire them from other countries than to use his own people. The army of Cambodia is smaller in proportion than that of the other parts of the country, and the French allow the king to do pretty much as he likes."



NATIVE SOLDIERS AT SAIGON.

Fred had reached the end of his chapter, and consequently came to a pause. The Doctor complimented him on his excellent account of the invasion and occupation of Anam, and after a little general talk on the subject, the party broke up.

As they were naturally interested in the subject of native troops in the French service, Frank took the first opportunity to make a sketch of a couple of them that he saw on duty. He found that they wore a blue blouse with white trousers—or, rather, that the trousers had been white at some former date—and their heads were protected from the

heat of the sun by flat hats made of pith or cork, while their feet were bare. The men that he saw were armed with breech-loading rifles of French manufacture, and they carried their cartridges at the waist-belt, after the European fashion.

Strolling by the river-bank, the boys saw three or four light gun-boats at anchor in the stream. They learned that the government had about twenty of these boats, which were used for transporting troops wherever they were needed, and also for the purpose of protecting the natives against pirates, and to enforce the laws generally.

They observed that the police were not of the same nationality as the soldiers, and found, on inquiry, that the policemen were all Malays from Singapore, under the supervision of French chiefs. They are said to be very efficient, and one great advantage of employing them is that they are not likely to be involved in any of the native conspiracies.

By the end of their second day in Saigon, it occurred to the boys that it was about time to begin a letter to friends at home.

"We will write it as we did the letters from Kioto and Hong-kong," said Frank; "that is, provided you are willing."

Fred assented to the proposal, and so it was agreed that they would make up a single letter, in which each should describe some of the things they had seen, and they would so arrange it that nothing should be described twice. They devoted all the time they could spare from sight-seeing to the production of this letter, and here is the result:

"We have been walking and riding around Saigon, and have seen a great many things that are new to us. This morning we started early for a walk to Cholon, about three miles away, and had a very pleasant time on the road. We met crowds of people coming to town with basketsful of fresh vegetables for the market; they were nearly all women, and their dress was much like that of the women we saw in Canton, except that they had great hats like circular trays. Part of the way the road follows the bank of a ditch, which the French call 'The Grand Canal;' but there is not much grandeur about it, as it is half-choked with weeds, and when the tide is out there is not water enough to float a boat of any size. There has been no rain for weeks, and the dust was so thick that sometimes we could hardly see across the road, and were in danger of being run over.

"Near the door of a house, in the edge of the city, we saw three beggars standing, while a man with his finger raised was talking to them. Doctor Bronson says the man who talked was their chief; and he was telling them what to do and where to go for the day. Begging is a

regular business in China, and the beggars have their associations, like other trades.



THE KING OF THE BEGGARS.

“We met a long line of carts just after we got outside the city; each cart was drawn by a pair of bullocks, and they had ropes through their noses, just as we put them through the noses of bulls at home. The foremost pair was led by a boy, and all the other bullocks were fastened to the carts immediately in front of them. How they get on without pulling some of their noses out, when a cart in the middle of the line breaks down, we cannot imagine. Perhaps the cord gives way before the nose does.

“There were lots of half-wild dogs that seemed to belong to nobody; they barked at us, and some of them threatened to bite; but we showed fight, and they concluded to leave us. These brutes are known as ‘pariah’ dogs all through the East: ‘pariah,’ as applied to a man, means an outcast; and a pariah dog is a dog that has no master and no home. They are not so abundant here as at Constantinople or Damascus, but Doctor Bronson says there are quite enough of them to go around, and they go around all night and all day.

"Such a noise as the cart-wheels made you never heard in all your lives. Grease must be scarce in Cochin China, or the people must be fond of music; at all events, they do not try to stop the squeaking, and a native will go to sleep in one of these carts when it is moving along the road, just as calmly as he would in a Pullman car. Doctor Bronson says that these carts are loaded with gamboge and other dye-stuffs, and also with hides and horns of cattle, and perhaps with the tusks of elephants that have been killed for the sake of their ivory.

"About half-way along the road, we came to what the French call '*La Plaine des Tombeaux*,' which is nothing more nor less than an enormous cemetery. It is said to cover several square miles of ground; whether it does so or not we cannot say, but certainly it is very large, and, as the Doctor remarked, very densely inhabited. There is nothing very remarkable about the tombs, as they are nothing but square enclosures, with little spires like those of the temples. In one part of the cemetery some priests were at work laying out a place for a grave; Doctor Bronson says that they perform a lot of ceremonies to determine where a grave shall be made, and are very particular to bring it under good influences, and shield it from bad ones. The same superstitions that prevail in China are to be found here; and even the most intelligent of the native or Chinese merchants in Saigon would not think of undertaking any important enterprise without first consulting the gods, and ascertaining that the '*Fung Shuey*' was in their favor.

"It was an odd sight to see the telegraph-poles along the road, and skirting the edge of this ancient cemetery. It was bringing the past and the present close together, and from all we can see the present is having the best of it.

"Well, we reached Cholon after a leisurely walk, and went down to the bank of the river, where great numbers of boats were moored. There were hundreds, and perhaps thousands of these boats, and at the place where they are moored they are tied very close together. They are rather long and narrow, and the best of them have a roof over the centre to protect the occupants from the sun and rain. Some of them are hewn out of single logs, and others are built of planks, as in other countries. Many are permanently fastened to the bank and are occupied as houses, like some of the boats in Canton; and altogether there is a pretty large water population. Near the water's edge there are huts built on platforms, and so arranged that the refuse of the kitchen falls into the river. The owner is under no expense for drainage, and the whole cost of his building does not exceed five dollars. Living is cheap



VIEW OF CHOLON.





in Cholon, if you are willing to occupy a grass-roofed hut, six feet square, on the bank of the river, and eat nothing more costly than boiled rice and fish. We saw two or three huts of the kind we describe, occupied by half a dozen persons each. They must have found the quarters rather close at times, but probably did not mind a trifle like that. A single plank served as the roadway to the shore, and in some instances it was so shaky that it required a steady head and careful stepping to avoid being thrown into the water.



▲ CHINESE FAMILY AT CHOLON.

“More than half the people we saw were Chinese, and not the natives of the country, and nearly all the business in the shops appeared to be done by the former. We peeped into some of the houses where the Chinese live, and they did not seem to care how much we looked at them. We saw one group that was quite interesting, in spite of the poverty of the habitation and the scarcity of furniture; there were five persons in all, or perhaps we should say eight, as there were three cats

under the table that acted as though they were as good as anybody else. Two men and two children were at a table, and a woman was standing up behind them to see that everything was all right. On the table there was a small tub that contained stewed fish and some kind of vegetables, and there was a bowl for each one to eat from. They were better off than some other parties we saw at breakfast, who had only one bowl for the whole lot, and everybody helped himself with his chop-sticks.

"We saw something that reminded us of Shanghai; it was nothing more nor less than a wheelbarrow, but, unlike the Shanghai one, it had no passengers. Wouldn't it be funny to see a wheelbarrow in America for carrying passengers, just as we have cabs and coaches? You must come to China for a sight like that, and also for a regular ride in a wheelbarrow, and you can have the consolation of knowing that it is very cheap and also very uncomfortable. The wheelbarrow has no springs, and so you get the benefit of every jolt, however small; and as the vehicle is somewhat weak in the joints, and the man who pushes



A CAB FOR TWO.

it is far from powerful, you feel all the time as though you were liable to be spilled out. The wheel is large and clumsy, and the frame has a sort of rest in the centre, where you can put your arms. Two men can occupy one of these coaches, and they are very popular among the natives, but less so among the foreigners.

"On our way back we wandered off into the forest of tropical plants that stood on each side of the road in many places, and suddenly came on a little village which was entirely concealed until we were within twenty yards of it. The natives like to hide their residences as much as they can, on account of the shade they get from the surrounding trees, and also to be undisturbed by too many visitors. The dogs barked at us, and if it had not been for some of the natives that called them off it is quite possible we should have been bitten. There were half a dozen children lying around in the dust, and as they were entirely naked, they did not seem to be afraid of soiling their clothes. The men and women were not heavily clothed, as the weather is hot, and they want to be as comfortable as possible. In one house a man was lying on a bench just inside the wide door-way, and a little girl was fanning him; the Doctor says the girl was undoubtedly a slave, and that she cost her owner not far from thirty dollars.

"Children are bought and sold here the same as in China, and a good many of the foreigners are said to own slaves while they live in the country, but they do not try to carry them away. Slaves prefer foreign masters to native ones, as they are more likely to be kindly treated, and to receive their freedom in a few years.

"Some of the houses in the village were well built, and raised a yard or so from the ground upon pillars of brick. The interior consists of three or four rooms, and the general appearance of the house is like a Chinese one. There is an ornamental framework carved in wood to support the roof, which is covered with thick tiles, and there is generally a veranda on each side of the door, where the master sleeps in the afternoon and lounges away a great deal of his time. We should call the people lazy if they were in America; but it is the custom of the country to be indolent, and perhaps they are not to blame. Very little will support a man, as he can gather fruit from the trees, and an acre of ground is all that he needs for maintaining a large family. The heat that prevails all the year round does not encourage activity, and a good many foreigners, who are very enterprising when they first come here, become as idle as the natives by the end of their second year in the country."

## CHAPTER IV.

## A WONDERFUL TEMPLE.—RUINS OF NAGKON WAT AND ANGKOR.

WHAT with sight-seeing, writing letters to friends at home, and filling their note-books with information for future use, the boys had enough to occupy their time during their stay in Saigon. In the course of their studies of the country and its characteristics, they became interested in its ancient history, and were desirous of seeing some of the ruins that remain from the early days of Anam and Cambodia. But as the



CAMBODIAN FEMALE HEAD-DRESS. ANCIENT SCULPTURE.

time at their disposal was too short, and the expense and difficulties of a journey to the interior would be very great, they were obliged to forego the pleasure they would derive from an actual visit to some of the most stupendous ruins in the world.

But the Doctor came to their relief in a great measure by giving them a full account of the wonders they were unable to contemplate.

"It is not generally known," said he, "that Cambodia contains the ruins of a temple that was greater in its time than the very famous one of Thebes in Egypt."

Frank and Fred opened their eyes in astonishment, as they had always believed there was nothing in the world that could surpass the Egyptian temples of old.

"I will describe them to you," he continued, "and make comparison between the work of the Egyptian builders and those of Cambodia. When I have finished, you will be able to judge which is the more magnificent.

"The great temple I refer to in Cambodia is known as the Nagkon Wat. Wat, in the Malay language, means temple, and the place in question is designated by the name 'Nagkon.' The province where it is situated is really in the territory of Siam—as it was taken from Cambodia near the end of the last century and annexed to the rival kingdom. If you want to find the ruins on the map, you must look in about latitude  $13^{\circ} 30'$  north, and longitude  $104^{\circ}$  east. It is not known who built the temple, as the inscriptions on the stones are in a language that is not understood at the present day. The general belief is that it was erected twelve or fifteen hundred years ago, but the estimates of its age vary all the way from five hundred to two thousand years.

"It is far more modern than the temples of ancient Egypt, and probably not nearly as ancient as some of the famous edifices of Syria. In course of time some one will be able to read the inscriptions, and then we will learn all about its age and the reasons for its erection."

"Here is a map of the ruins as they exist to-day," said the Doctor. "You perceive that the general shape of the work is a square, and that there are altogether three squares, the smaller inside the greater."

The boys looked at the map, and indicated that they observed the outline of the temple.

"Well," continued Doctor Bronson, "the outer wall, which is not shown in the plan, is more than half a mile square; if you should undertake to walk around it you would have a promenade of nearly three miles.

"Outside the wall there is a wide ditch that was evidently of considerable depth when first made, but it is filled in many places with weeds and trees, and there is a forest of palm-trees between the outer wall and the body of the temple.

"The main entrance is by a causeway, which you see extending upward from the foot of the map. The whole length of this causeway, from its beginning beyond the outer wall to the entrance of the temple, is nearly two thousand feet, and more than half this distance is within the wall. The building itself, as you see it on the map, is oblong in shape, being eight hundred feet long by five hundred and ninety wide; it rises in three terraces to a central tower two hundred and fifty feet high, and there are four other towers at the corners of the inner temple that are each one hundred and fifty feet from the ground.

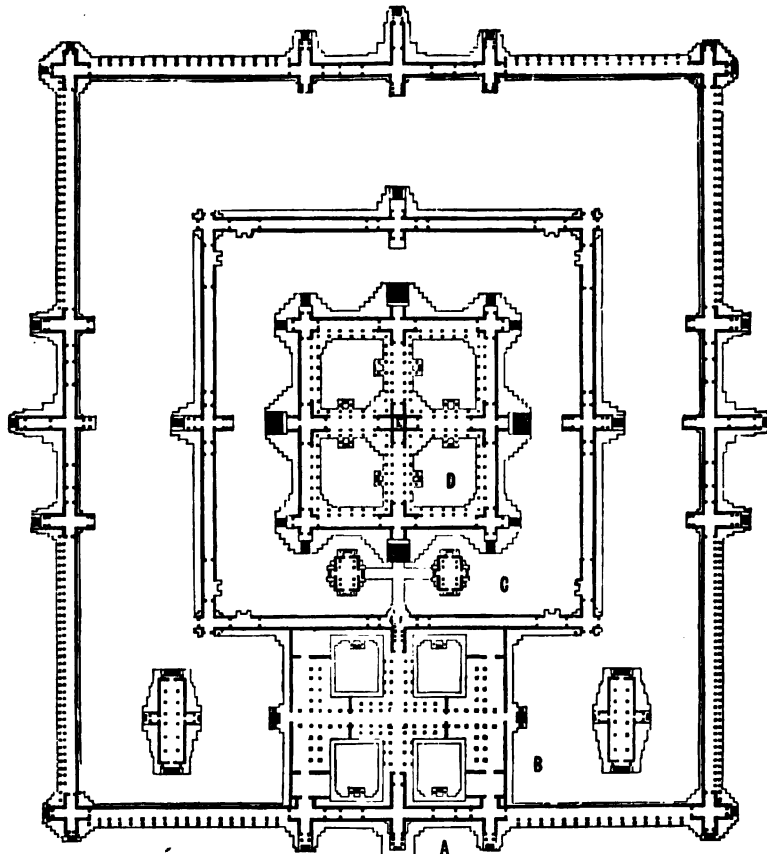


Fig 1.

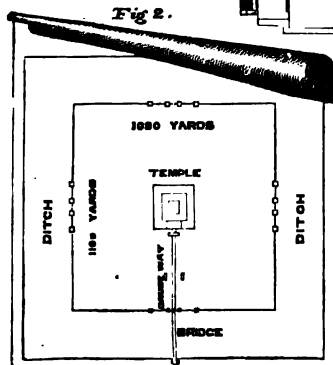


Fig 2.

- A Western Façade.
- B First Terrace.
- C Second Terrace.
- D Third Terrace.
- E Central Shrine and Tower.

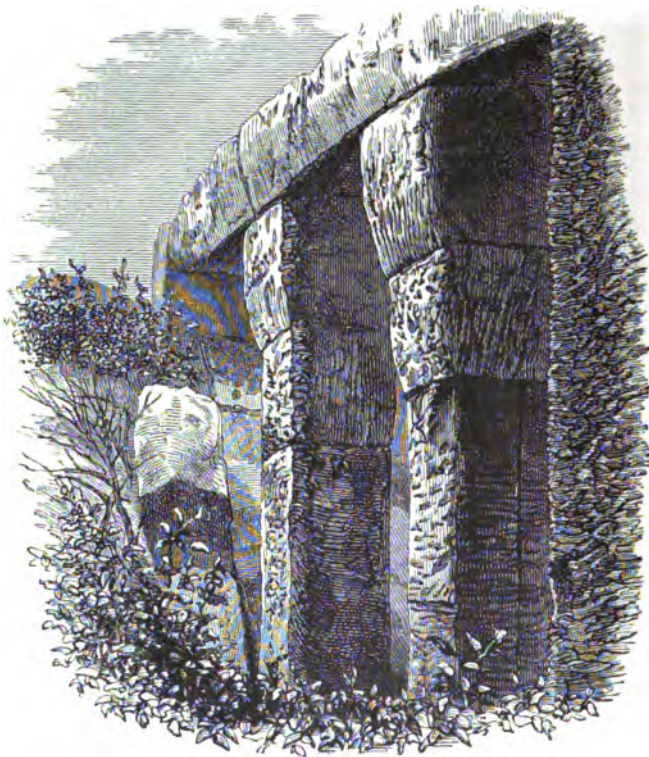


Fig. 1. Plan of Inner Temple at Nagkon.

Fig. 2. Plan of area enclosed by outer wall of Nagkon Wat.



“The causeway was paved with blocks of sandstone, and the edifice throughout is of the same material. All the stone for the work was brought from a quarry thirty miles away, and the transportation alone



UNFINISHED PILLARS.

was an enormous affair. The blocks were brought in a rough state, and were not finished until they had been put in the positions where they were to remain. The temple was never completely finished, as there are several columns that remain just as they came from the quarry, and a careful observer can indicate the exact spot where the workman turned away from his labor. It is supposed that the stone was brought on boats in a canal, as there is no road that could have served for purposes of transit.

“It is impossible to describe in detail all the halls, and corridors, and sculptured walls of this wonderful temple. There are several halls composed of rows of solid columns, like the great hall of the temple at



Thebes. I remember standing astonished at Thebes as I looked at the great hall, with its one hundred and thirty-four columns, and learned that, originally, the temple contained nearly three hundred columns of different sizes. In the Cambodian temple of Nagkon Wat, one thousand five hundred and thirty-two solid columns have been counted; and



COLUMNS IN THE TEMPLE.

it is estimated that there are not less than six thousand columns in the entire mass of ruins in and around the temple. Most of these columns are made from single blocks of stone, and all of them are beautifully carved, just as the Egyptian ones are beautifully painted.

“It would not be at all difficult for a stranger to lose his way in Nagkon Wat, and wander for hours, unable to find an exit. He might



SCULPTURES ON THE WALLS OF NAGKON WAT.

spend days and days in the study of the beautiful sculptures that adorn the place; and when I tell you that the walls are covered with sculptures from one end of the temple to the other, and you remember the enormous size of the building, you can understand what a gigantic picture-gallery it is. The scenes represented are mostly from the Hindoo mythology; they illustrate battles and triumphal processions, sacrifices and festivals, and also the contests of some of the Hindoo deities with each other, and with mortals. There is one gallery alone that has half a mile of pictures cut in stone, and it is estimated that at least one hundred thousand human figures are engraved there. Here is a picture of some of them, and you may judge by it of the general excellence of the work throughout."

The boys devoted several minutes to the contemplation of the photograph which the Doctor showed them. Frank remarked that the lightness of the wheels of the chariot would seem to indicate that it was made of metal, and consequently the ancient Cambodians must have been familiar with the use of iron or brass, perhaps both. The soldiers at the bottom of the picture were marching in a manner that denoted military discipline, but he could not make out the nature of their weapons. Certainly they were not rifles, as fire-arms were unknown in those days, and they did not seem to be spears or bows and arrows. The men were provided with shields, and in this respect their customs resembled those of many people of the present day.

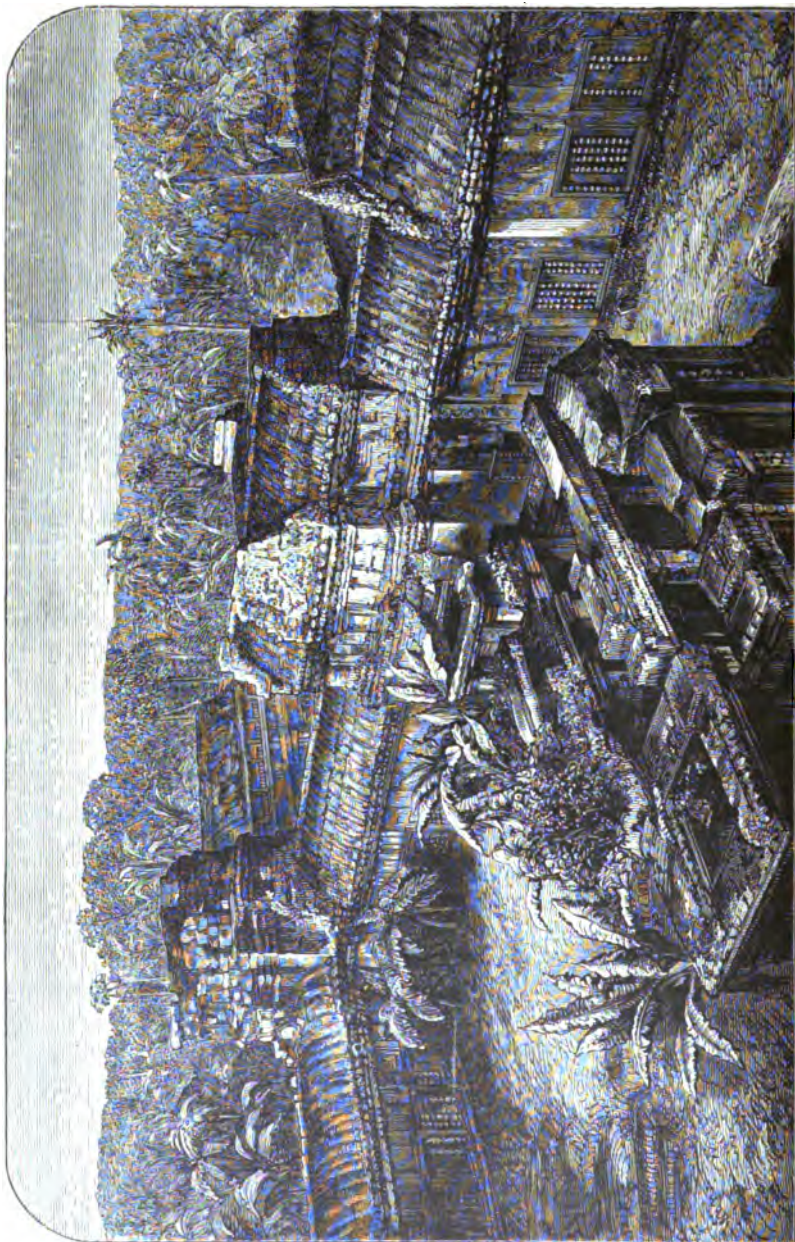
The Doctor explained that the ancient Cambodians made use of spears; but the principal weapons they employed were clubs, not altogether unlike those of the South Sea Islanders. Sometimes the club was made straight, and at others it was curved at the end farthest from the hand of its owner. It was wielded with the right hand, and the shield was carried in the left.

Fred called attention to the fact that there was an elephant in the picture, and the man on his back was in the act of discharging an arrow from a bow. Therefore they must have employed bowmen, and evidently they were an important part of the service, as they were mounted on elephants.

"You are quite right in your conclusions," Doctor Bronson responded; "the bowmen were considered of the highest importance, and their arrows often did great execution. The elephant had a prominent place in all the armies of the East, as you know from history, and the Cambodians were no exception to the rule. No Eastern king would consider his retinue complete without a large number of war-elephants in his stables."

"There is a tradition," he continued, "that the king of ancient Cam-





VIEW FROM THE CENTRAL TOWER OF THE TEMPLE.

bodia had an army of half a million of men, with a hundred thousand elephants, which he could lead to war at a few days' notice. This is undoubtedly an exaggeration; but he probably had a good supply of these very useful animals, and his army presented a fine appearance when it was called to the field."

Frank observed that the men did not wear armor, and, in fact, had very little clothing anyway. He wondered that this was the case, as the king was evidently very rich and powerful, and ought to have had his army equipped and dressed in the best possible style.

Fred replied that armor, in a hot country like Cambodia, would be a very inconvenient thing for a soldier, and render him practically useless. Frank had not thought of that, and as soon as his attention was called to it he quite agreed with Fred.

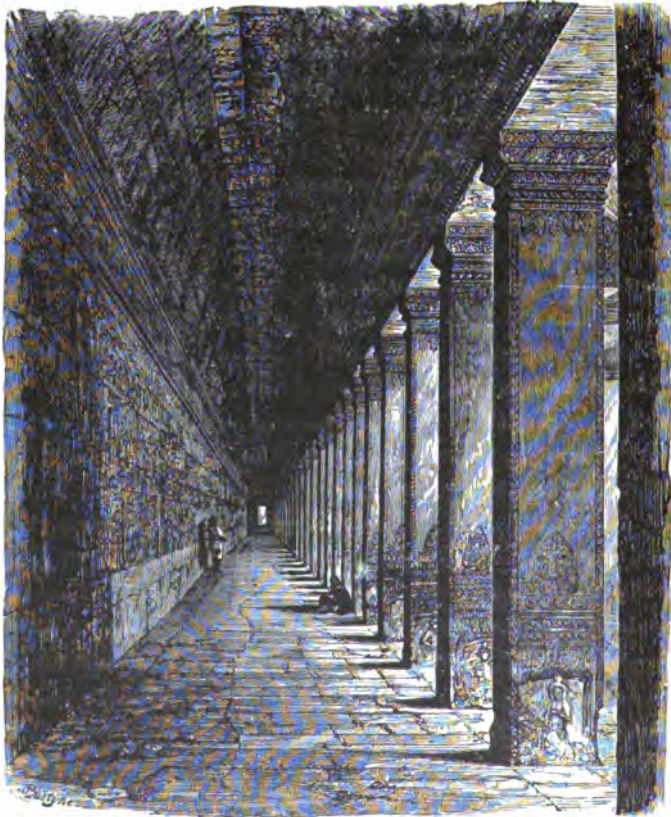
"A gentleman who visited the temple of Nagkon Wat," the Doctor remarked, "has given a very good account of the general character of the sculptures on the walls. I refer to Mr. Thomson, and cannot do better than quote a few lines from him.

"The bass-reliefs," says Mr. Thomson, "which are sculptured on the walls of the galleries of Nagkon Wat are extremely interesting. They are contained in eight compartments, measuring each from two hundred and fifty to three hundred feet in length, with a height of six and a half feet, and in a square space of six and a half feet the average number of men and animals depicted is sixty. The majority of these representations are executed with such care and skill, and are so well drawn, as to indicate that art was fostered, and reached a high state of perfection among the 'Khamen-te-Buran,' or ancient Cambodians.

"The chief subjects represented are battle scenes, taken from the epic poems, Ramayana and Mahabharata—which the Siamese are said to have received from India about the fourth or fifth century. Disciplined forces are depicted marching to the field, and possessing distinct characteristics soon lost in the confusion of battle. In the eager faces and attitudes of the warriors, as they press forward past bands of musicians, we see that music then, as now, had its spirit-stirring influence. We also find humane actions represented—a group bending over a wounded comrade to extract an arrow, or remove him from the field. There are also the most animated scenes of bravery—soldiers saving the lives of their chiefs; chiefs bending over their plunging steeds, and measuring their prowess in single combat; and, finally, the victorious army quitting the field laden with spoil, and guarding the numerous captives with cavalry in front and rear.

“Perhaps the most wonderful subject of all the bass reliefs is what the Siamese call the battle of ‘Ramakean.’ This is one of the leading incidents of the Ramayana, of which Coleman says, ‘The Grecians had their Homer, to render imperishable the fame acquired by their glorious combats in the Trojan war; the Latins had Virgil, to sing the prowess of Æneas; and the Hindoos have their Valmac, to immortalize the deeds of Rama and his army of monkeys.’ The Ramayana—one of the finest poems extant—describes the scenes of Rama’s life, and the exploits of the contending foes.

“In the sculptures of Nagkon Wat, many of the incidents of the life of Rama are depicted; such as his final triumph over the god Ravana,



GALLERY OF SCULPTURES.

and the recovery of his wife Sita. The chief illustration of the poem; however, is the battle scene which ensues after the ape-god Hanuman

had performed several of the feats which formed the every-day incidents of his life, such as the construction of what is now known as Adam's Bridge, between Ceylon and India. This he accomplished by a judicious selection of ten mountains, each measuring sixty-four miles in circumference; and being short of arms, but never of expedients, when conveying them to Ceylon, he poised one of them on the tip of his tail, another on his head, and with these formed his celebrated bridge, over which his army of apes passed to Lanka.

"In another compartment the subject appears to be the second Avatar of Vishnu, where that god is represented as a tortoise supporting the earth, which is submerged in the waters. The four-armed Brama is seated above. A seven-headed snake is shown above the water, coiled around the earth, and extending over the entire length of the bass-relief. The gods on the right and the *dinytas* on the left are seen contending for the serpent. Hanuman is pulling at the tail, while above a flight of angels are bearing a cable to bind the reptile after the conflict is over.

"In another compartment we find various mechanical appliances that are in use to-day. There are double-handled saws; and there are knives, levers, wedges, pestles and mortars, and a number of other contrivances that are more or less familiar to us."

The boys listened with much interest to the reading of the preceding account. When the Doctor concluded, Frank ventured to ask if the temple was in a good state of preservation, and whether it was in use at the present time.

"It has greatly decayed," replied Doctor Bronson; "but there are so many of its walls and galleries standing, that the most careless visitor cannot fail to be impressed with its grandeur, and be able to trace out every part of the original plan. In many places the weeds and grass and other vegetation are so luxuriant that the work of the architects is concealed, and can only be found by searching. There is one tree, called the 'poh,' that is a great destroyer of walls and stone floorings. The whole temple was constructed without the use of cement, and in many instances the junction of the stones is so perfect that only a slender line can be perceived. The roots of the poh-tree insinuate themselves into the smallest crevice; then they grow and expand, and by so doing they gradually force the stones apart. This tree has been of great injury to the temple we have been considering, and to many other edifices in these tropical countries of the East.

"In reply to your second question, I can say that the temple is still used, though not to the extent it was in its early days. A few priests





ANCIENT TOWER OVERGROWN WITH POH-TREES.

live there, and perform services at regular periods; they are supported by the contributions of the followers of Buddha, who visit the place, and by donations from the inhabitants of the country round there. They do not live in the temple itself, but in small huts erected inside the enclosure that surrounds the great building. These huts are of thatched grass, and stand on posts as a security against the snakes that abound in the neighborhood. They are shaded by the palm-trees that have grown up in what was once a clear space around the temple, and in hot afternoons their protection is very grateful."

Fred inquired about the other ruins in Cambodia, and wished to know how extensive they were.

"As to that," the Doctor explained, "I cannot speak positively, and I doubt if there is any one who can. About three miles from Nagkon Wat there are the ruins of a city which was known as Angkor, which

was evidently a very important city in its day. It was the capital of Cambodia, and, according to the description of a Chinese official, who visited it in the year 1295, it was something remarkable. It was then in the height of its glory; but three hundred years later, when it was visited by a Portuguese missionary, it was almost in ruins, and had ceased to be of any consequence. Then there was another period of nearly three hundred years in which nothing was heard of or from Angkor; it was not till the year 1855 that any writer seems to have gone there, and as for the Cambodians themselves, they are sublimely ignorant of the history of this once great city.

"In the year I last mentioned, M. Mouhot, a French explorer, passed through Cambodia and made a careful survey and description of the ruins. He subsequently died in the northern part of Siam, and it was feared that the result of his labors would be lost, but fortunately his journal was saved and has since been published. Since Mouhot's time several persons have written about the ruins, so that a fair amount of knowledge concerning them is accessible. But every year new remains are discovered among the trees of the thick forest, and it is difficult to



HUTS OF THE PRIESTS.

say when all of the ancient walls and statues and temples will be brought to light."

At the conclusion of the Doctor's remarks, a servant entered with the announcement that dinner was on the table. Thereupon the mental feast on the antiquities of Eastern Asia was abandoned for the more practical feast on the edible productions of the country. Frank thought that the dinner would receive a high compliment if it proved as enjoyable as their talk about Nagkon Wat and the ruins of Angkor—an opinion which Fred lost no time in sharing.



STONE WITH ANCIENT SCULPTURES.

## CHAPTER V.

## CAMBODIA.—ITS CAPITAL AND KING.

HAVING studied ancient Cambodia, Frank and Fred were desirous of learning something of the modern country of that name. At the hotel where they were stopping they found a gentleman who had recently been at Panompin, the Cambodian capital, and had spent sufficient time there to be able to give a good account of it. As soon as he found that his young acquaintances were anxious to hear about Cambodia, he promptly consented to enlighten them.

He was at leisure one evening after dinner, and, by mutual consent, the party gathered on the veranda in front of the hotel, and an hour was pleasantly passed in conversation regarding the little-known country.

"If you think," said the gentleman, "that Panompin is a large city, as one naturally thinks of the capital of a country, you would be greatly disappointed if you went there. Its population is not more than twenty or twenty-five thousand, and is made up of several nationalities. There are Siamese, Chinese, Anamese, and Manilla men among the inhabitants, as well as the native Cambodians, and there are no long streets of fine buildings, such as you would expect a capital to contain. It is situated on the banks of the Mesap, a small river of Cambodia that empties into the Mekong: the greater part of Panompin is on the right bank of the stream, but there is a small portion of it on the opposite shore, and another on an island near the junction of the Mesap with the Mekong. To locate



A CAMBODIAN IDOL.



it on the map, you must put your finger at about latitude  $11^{\circ} 30'$  north, and longitude  $105^{\circ}$  east, and if your map is a good one, you will find a large lake not far off.

"This is Lake Thalysap, and it is a body of water of no small importance. It is about ninety miles long, and varies from eight to twenty-five miles in width. It is very shallow except in a few places, and in the wet season the country around it is so flooded with water that the lake is then a hundred miles and more in length. There are many villages



FISHING-VILLAGE ON LAKE THALYSAP.

along the shores of the lake, and at all seasons of the year you can see whole fleets of boats going to and fro over the water. Great quantities of fish are caught in the lake, and those not intended to be eaten in the vicinity are dried or salted for export to other parts of Asia. There are also many fish caught for their oil; the villages along the lake make a considerable business by preparing this oil, and the stench is often so great that your nose will tell you the location of a village before your eyes do.

"In the lower part the lake narrows steadily until it forms a river, and this river is the Mesap, which I have mentioned to you; consequently you have only to follow the current to come to Panompin. It

has only been the capital within the last ten years; until that time the seat of government was at Oodong, and the change was made on account of the supposed unhealthiness of the latter place. The real fact is that Panompin is better situated for commercial and political purposes, as it is at the end of the great lake, and close by the River Mekong. If you could see the two places you would understand it at once.

"You can have little idea of the quantity of fish caught in the lake and river till you see them. Lots of towns and villages are entirely occupied with the fish business, and some of these towns contain as many as four hundred houses, though the most of them are smaller. Some of the fish are eight or ten feet long and three feet thick, and their bodies are so full of oil that one of them is a good prize to his captor. It is very funny to see a native struggling with one of these large fish; and sometimes it requires a hard fight to bring him in. I have seen a man dragged into the water and nearly drowned; and though I enjoyed the performance, I presume it was no fun at all to the man.

"Panompin consists, for the most part, of bamboo huts, without much pretence of architecture, and the streets are so bad that though the king has several carriages he rarely rides out. The principal street is about three miles in length, and somewhat irregular in its course, as though the instruments of the surveyor who laid it out were not in the best order. There are a few stores and shops of brick, and there are some temples whose spires rise above the buildings that surround them. The palace of the king is the finest edifice in the place; it was designed by a French architect, and the construction was supervised by him, but all the actual work was performed by natives. It is like a fine dwelling-house in the neighborhood of New York or London, and the internal arrangement of the rooms is entirely European in character. The palace has some large halls for receptions, and it has dining-rooms, sleeping-rooms, and all the usual apartments that a dwelling should contain. The king lives there; and, as he rarely goes out, he determined to have a residence as comfortable as could be made. He is very proud of it; and if you should visit him he would consider it a great politeness if you admired it all you possibly could—and a little more.

"Not far from the king's palace is the barrack, where the French troops are quartered for the preservation of order, and to see that the king does nothing that would be against the interest of his protectors. There is generally a French gun-boat or two lying in the river opposite the barracks, and in the river farther down there are two or three small gun-boats and steamers that belong to the king, and are kept near his palace.



PANOMPIN, THE CAPITAL OF CAMBODIA.



"As the city has so much dependence on the river for its support, there is a tendency on the part of the inhabitants to crowd near the stream; consequently Panompin stretches about three miles along the bank, and less than half a mile away from it. This is where you find the street I have mentioned; it is not more than thirty feet wide, and paved with a concrete mass of broken brick mixed with sand. You find a straggling line of low huts of bamboo or other light material along the whole length of this street, and in the busy hours of the day the assemblage of people is pretty dense. The Chinese are great gamblers, and a goodly portion of these huts are gambling-shops, whose proprietors pay a license for the privilege of running the business. In several of these Eastern countries the money received from gambling forms an important item in the public revenue; and if it should be stopped, the treasury would suffer in consequence."

"What an outrageous piece of business!" said Frank. "To think that a government would derive any part of its revenue from gambling!"

"But remember we are in Asia," Fred remarked; "and we can't expect these people to be civilized."

The Doctor smiled at this outburst of indignation, and when it was ended he reminded the boys that several governments of Europe did exactly what they thought so reprehensible when done by Asiatics.

"Not governments of any consequence," said Frank.

"Well," answered the Doctor, "I hardly think we could say that. Italy, Spain, and Austria are certainly of some consequence, and in all of them the lottery, which is a form of gambling, is a government institution. It is only a few years ago that the gambling-tables at Baden-Baden, in Germany, were stopped, and there was serious talk, at the time, of allowing the gamblers that were suppressed in Germany to open their business at Geneva, in Switzerland.

"And furthermore," Doctor Bronson continued, "we cannot throw many stones at the Chinese and other Eastern people for gambling when we have so much of it in America. In all our large cities the vice exists in defiance of the law; and in some of the States, particularly in Kentucky and Louisiana, the lottery is a recognized institution, and the drawings are supervised by officers appointed by the governor."

Frank and Fred both declared that this information was new to them, and hereafter they would not be too hasty to condemn other countries, lest they might find that the thing they objected to prevailed in their own.

The description of Panompin was resumed:

"There are some manufactures in the Cambodian capital," their informant continued, "but they are not numerous. The people are famous for their manufactures of silk, which is an important article of export, both in its raw and in its finished state. They are skilful workers of gold and silver, and I could show you some exquisite specimens of their production. Wait a moment and I will bring one."

He went to his room, which was situated just off the veranda, and returned in a few moments with a small box resembling a flattened orange, or, more properly, a melon. The boys took it to the light, and examined it with care.

The gold, as well as the workmanship, was Cambodian; some of it was the natural color of the metal, and other parts were stained to various degrees of redness. On the top there was a cluster of leaves, and the end of the stem contained a topaz, which had been purposely left unfinished.



SPECIMEN OF CAMBODIAN GOLD-WORK.

The leaves were in fine filigree, and some of the wires were so delicate that they resembled golden hairs. The whole surface of the box was covered with flowers and leaves in the most tasteful designs; and both the boys were of opinion that the jewellers of New York would not find it easy to imitate this production of the Asiatic barbarians.

"The king has a fine collection of these things," the gentleman continued, "and he generally gives one of them to any stranger of importance who visits him. It is lucky for his treasury that it is not easy to go to Panompin, as otherwise he might find these presents a serious expense.



THE KING OF CAMBODIA.

"And if you wish to know about the king, here is his photograph. You perceive that it is taken in European dress, which he wears on grand occasions, and has adopted since the French Protectorate was established in Cambodia. He is an amiable gentleman of pleasing manners, and makes an agreeable impression on those who come in contact with him. He has quite a collection of English and French books, maps, and albums, and is fond of showing them; and he has a fine lot of Japanese and Chinese vases—enough to stock a fair-sized museum. Then he has European clocks, music-boxes, and the like; and he has a billiard-table, on which he plays very well. He also has a piano, but those who have heard him perform on it say that he is better at billiards than at music.

"The carpets, furniture, and other adornments of his palace are mostly from Europe, but he has some fine specimens of native embroidery that are fully equal to any of his foreign importations. He sleeps in a bed of European manufacture, and the netting that protects him from mosquitoes is from an English or French loom. He has travelled to Hong-kong and Shanghai, where he spent much time in learning all he could about the productions of the western part of the world, and, on his return, he endeavored to give his people the benefit of his knowledge. He is much liked by his people; and, on the whole, they could hardly hope for a better ruler.

"The Queen of Cambodia, like most of the Asiatic queens, is rarely seen in public. She has not adopted the foreign dress, but adheres to the *panoung*, a sort of loose wrapper falling a little below the knees, and gathered at the centre. Here is her portrait, with two of the royal children; and you will observe that she wears heavy anklets of gold, and does not think it necessary to cover her feet with shoes. Her hair is cut in the national way, and sticks up in the centre like a shoe-brush. Great importance is attached to the ceremony of hair-cutting when a royal child reaches the age of seven years, and it is generally performed by the king himself in the presence of all the dignitaries of the land."

"What a funny idea!" said Fred, "that the king shall act as a barber, and handle the shears over the head of one of his children. I wonder if he is as skilful as a regular professional?"

"As to that," was the reply, "I presume it does not make much difference. He only takes off a lock or two, and the hair-dresser of the palace does the rest. You will hear more of this curious ceremony when you get to Siam, as the custom prevails there no less than in Cambodia.

"In Panompin there is an artificial mound, which is called for politeness' sake a mountain, where the hair-cutting ceremony is performed. It





QUEEN OF CAMBODIA AND ROYAL CHILDREN.

stands near the palace, and is as high as the building itself. It is built partly of earth and partly of bamboo, and the sides are colored so as to represent stone, silver, and gold, the last color being near the top. A winding path leads up to a platform on the summit, and here the king stands while he goes through the solemnities of the occasion. The path goes through tunnels and arches, and occasional grottoes and valleys, and the whole structure is intended to represent a mountain in miniature. The platform is a favorite resort of the king in the evening, as the air is generally cooler there than on the ground below, and not infrequently he meets his ministers on the top of the mountain to discuss matters of public importance.

"But it is getting late, and I think I have told you as much about Panompin and the King of Cambodia as you will be likely to remember. So I will say good-night."

The boys thanked the gentleman for his kindness, and the Doctor added his acknowledgments to theirs. Then the party separated.



THE HARBOR OF OODONG, CAMBODIA.

Frank and Fred sat up till their eyelids were heavy to take down in writing a summary of what they had heard. They realized the necessity of making their notes at once, through fear that if they waited till the next day something would be forgotten. Frank wrote the description of Panompin and the country generally; and Fred devoted himself to the royal family, the scenes in the palace, and the curious story of cutting the youthful hair. Thus the labor was divided to the satisfaction of both.

In the morning the Doctor informed them that they were to depart that day for Siam. The steamer *Danube* had arrived, and her captain had been early on shore to arrange for the delivery of what cargo was to be landed, and to receive what he should take away. He did not expect to be long in port, and they must be prepared to leave at a few hours' notice.

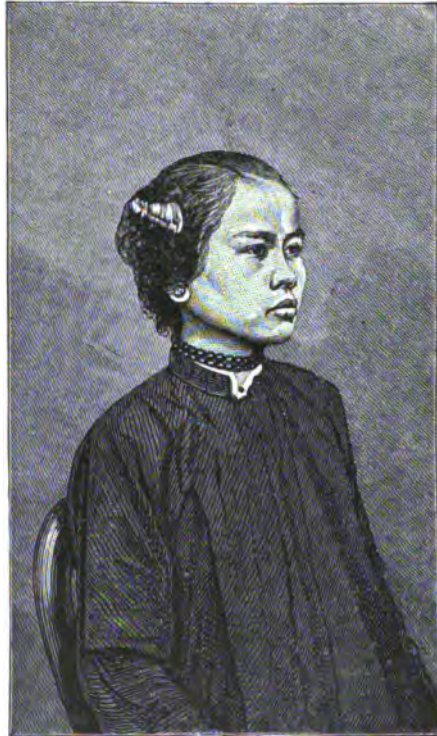
Their baggage was put in readiness, and the rest of the time on shore was devoted to the preparation of letters for America. The French mail steamer from Singapore was due that day on her way to Hong-kong and Shanghai, and when she left she carried a goodly budget from the boys.

In due time the letters were safely delivered; and for a fortnight there was little else talked of in the Bassett and Bronson households than the adventures of Frank and Fred in Cochin China.

The boys made good use of their time up to the last moment. Fred found a copy of the book of M. Mouhot, who has been mentioned heretofore, and the last hour of his stay in Saigon was devoted to writing out the description which that gentleman gives of Oodong, the former capital of Cambodia. The visit of M. Mouhot was made in 1860, and is thus described:

"On approaching the capital the prospect becomes more diversified; we passed fields of rice, cottages encircled by fruit-gardens, and country-houses belonging to the Cambodian aristocracy, who come here in the evening for the sake of breathing a purer air than they can find in the city. As we drew closer to the gates, I found the place to be protected by a palisade three metres high—about ten feet. The houses are built of bamboo or planks, and the market-place occupied by the Chinese is as dirty as all the others of which I have made mention. The largest street, or, rather, the only one, is about a mile in length; and in the environs reside the agriculturists, as well as the mandarins and other government officers. The entire population numbers about twelve thousand.

"The many Cambodians living in the immediate vicinity, and still more the number of chiefs who resort to Oodong for business or pleasure, or are passing through it on their way from one province to another, contribute to give animation to the capital. Every moment I met mandarins, either borne in litters or on foot, followed by a crowd of slaves carrying various articles; some yellow or scarlet parasols, more or less according to the rank of the person; others, boxes with betel. I also encountered horsemen



A GIRL OF OODONG.



mounted on pretty, spirited animals, richly caparisoned and covered with bells, ambling along, while a troop of attendants, covered with dust and sweltering with heat, ran after them. Light carts, drawn by a couple of small oxen, trotting along rapidly and noiselessly, were here and there to be seen. Occasionally a large elephant passed majestically by. On this side were numerous processions to the pagoda, marching to the sound of music; there, again, was a band of ecclesiastics in single file, seeking alms, draped in their yellow cloaks, and with the holy vessels on their backs."



HOUSE IN THE SUBURBS.

## CHAPTER VI.

## DEPARTURE FROM SAIGON.—VISITING A CHINESE JUNK.

WHEN the party went on board the *Danube*, the boys found that they were not to have the comforts of the great steamers that had brought them from Shanghai and Hong-kong. The *Danube* was a small ship, and her builders did not design her for carrying passengers; she was constructed in England, and, after she arrived in China, a little cabin was built on her deck, so that a couple of passengers might have a room to share between them. The dining-saloon was about six feet long, and as many wide, and its cushioned sofas could be used as beds. Consequently, she could carry four passengers with comparative comfort, and, in emergencies, another could sleep on the table when the sea was smooth, or under it in rough weather. The captain was a jolly Englishman, who gave a hearty greeting to the American strangers, and before they had been ten minutes on board they felt quite at home. Their heavy baggage was sent below, and there was plenty of room under the bunks in the cabin for stowing all the articles they needed on the voyage.

The *Danube* moved from her anchorage and turned her prow down the river.

"Hurrah!" shouted Frank, "now we are off for Siam."

Fred joined his cousin in raising a cheer.

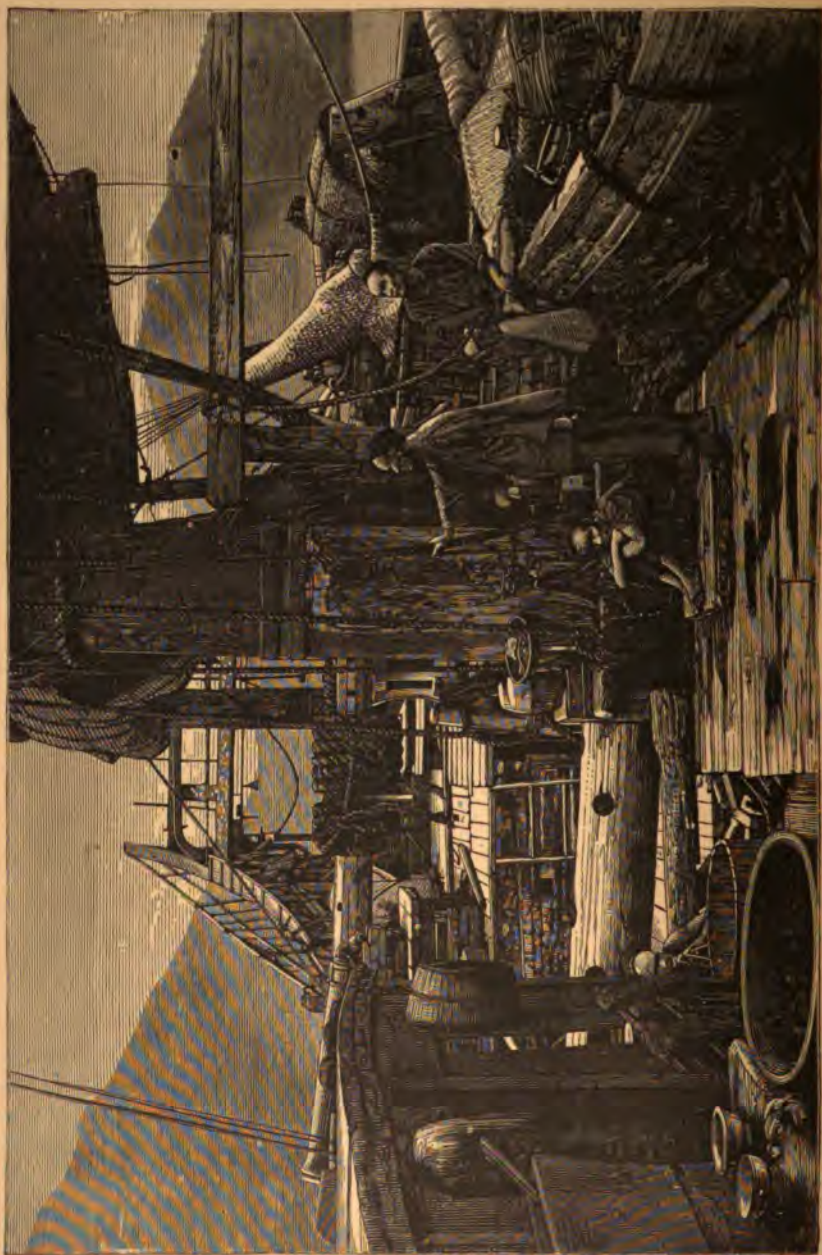
"Don't be in too great a hurry," said Captain Clanchy, "we are not off yet. We are to go along-side that Chinese junk you see just at the bend of the river, and will take some cargo from her. We shall probably be two or three hours about it, and then we will be off for Siam."

Frank's face fell at this intelligence, but only for a moment.

"We shall have an opportunity of seeing a junk and going on board of it," he remarked, "and that will repay us a dozen times over for the delay."

Fred was equally happy at the prospect, and both the boys were impatient to be on the deck of the strange craft.

In a little while their wishes were gratified, and they were able to



A CHINESE JUNK.

step from the *Danube* to the great junk. Before they did so Fred suggested that he had just thought why these Chinese ships were called junks.

"Why is it?" Frank asked.

"Because," was the reply, "you can see from the shape of them how they are built. The Chinese make a ship a mile or two long, and when they want one they cut off a junk, or chunk, just as you like to spell it. Then they stick masts into it, and it is ready to sail away. It is square at both ends, and resembles a chunk out of a log more than anything else."

There was a laugh all around at Fred's humorous description of the Chinese process of ship-building, and by the time the joke had ceased to amuse they were ready to go over the side. Captain Clanchy accompanied them, and pointed out several objects of interest that otherwise might have escaped their attention.

"You observe," said the captain, "that the deck of the junk is lumbered up with all sorts of stuff. How the men manage to get around is a mystery, and it is a wonder that they can keep the craft on her course with everything in such confusion."

The boys were equally puzzled, and thought there must be a good many junks lost every year. The captain said such was the case; but, on the other hand, there was such a great number of these craft that a few more or less made no perceptible difference.

"Except to the owners and the men that are lost with the junks," remarked the Doctor. "It must be a very serious affair to them."

"Sometimes these junks last to a great age," the captain continued. "There are junks now navigating the China seas that are more than a hundred years old; at least so I am informed."

"How long have the Chinese had this model for their ships?" Frank asked of the captain.

"Nobody knows how long," was the reply. "We are ignorant of the early history of China, and can only guess at many things. But we have reason to believe that the Chinese were the first people that ever built ships to be propelled by the force of the wind alone. They began with the model they now have, and have stuck to it ever since."

"Where is the captain of this junk?" Fred asked. "I would like to see him."

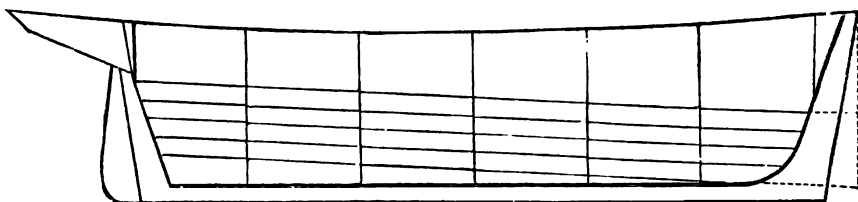
"She has probably half a dozen captains," Clanchy replied; "perhaps a dozen."

"A dozen captains! how can that be?"

"They build these junks in compartments," said the Doctor, in response to Fred's inquiry, "and each compartment has a captain."

"I thought the plan of building ships in compartments was of modern invention, and had only been applied to ocean steamers in the last thirty years. Seems to me I heard so," Frank remarked.

"In one sense you are right," the Doctor answered; "it is only about thirty years ago that the English and American ship-builders began the adoption of this principle. Nearly all the great steamers now navigating the Atlantic Ocean are divided into compartments—generally five



OUTLINE OF MODERN SHIP, SHOWING COMPARTMENTS.

or six; and even should two of these spaces become filled with water from any accident, the ship will continue to float. Several steamers have been saved after collision with icebergs, or with other ships, by reason of being thus constructed. Had they been of the old model, they would have infallibly gone to the bottom.

"But the Chinese are ahead of us, as they have built their ships in this way for centuries. Six hundred years ago Marco Polo visited the East, and on his return wrote a book about the country and people. He describes the compartment ships that the Chinese built at that time, and explains their advantages. The wonder is that it took the European builders so long to copy the idea. Not till well into this century was it adopted."

"But how about the half-dozen captains?" Fred asked. "Why should a ship like this have so many, when the *Great Eastern* or the *City of Chester* can get along with one?"

"The way of it is," said Captain Clanchy, "that the junk has a lot of compartments—anyway from six to a dozen—and each compartment is let out to a merchant. He is captain of that compartment and all it contains; and if there are ten compartments, he is one-tenth captain of the whole. The crew is under a chief who gets his orders from the merchants, and they have a great deal to say as to how the junk shall sail. Sometimes they want her to go to half a dozen places at once, and

in as many directions, and not infrequently they get into frightful rows about it. Don't understand me to say that this is always the case, or anything like it, as a good many of their junks are managed pretty much as an English ship would be. We will see how the matter stands on this one."

A little inquiry revealed the fact that there were two men on board equally interested in the cargo, and with equal authority over the movements of the junk. But they were evidently working in perfect harmony, and so there was no chance that the strangers would be compelled to witness a row among the commanders.

The boys found the deck of the junk covered with a very complex arrangement of ropes, windlasses, tubs, and baskets. Some of the crew were sitting around waiting for orders, and others were at breakfast. As soon as the *Danube* was made fast alongside, they were set at work to remove the cargo from one of the compartments and transfer it to the steamer. The steamer's crew assisted in the work, and in a little while it was accomplished. During this time the great sail of matting was flapping against the mast, and the ropes were swinging as though they would become hopelessly entangled. But no accident happened; and when the *Danube* had moved away, the sails were run up and the junk began to push slowly through the water. This gave the boys an opportunity to see her general shape and mode of construction.

They found that she was built of heavy planking, and that many of the planks retained the shape of the tree from which they were taken. These planks, as they were told, were fastened together by wooden tree-nails; in fact, there was very little metal about the fastenings; and, as a further security, there were a good many lashings of ropes to hold the outside timbers to the frame. The stern rose high out of water, and was



A JUNK SAILOR AT BREAKFAST.



cut off square, and the same was the case with the bow. The funniest thing was a pair of great staring eyes, to enable the ship to see her way, and to frighten off the demons that infest the waters and have a particular hostility to sailors. Every boat and ship of Chinese construction is provided with eyes, and the larger the eye the better the craft can take care of herself.

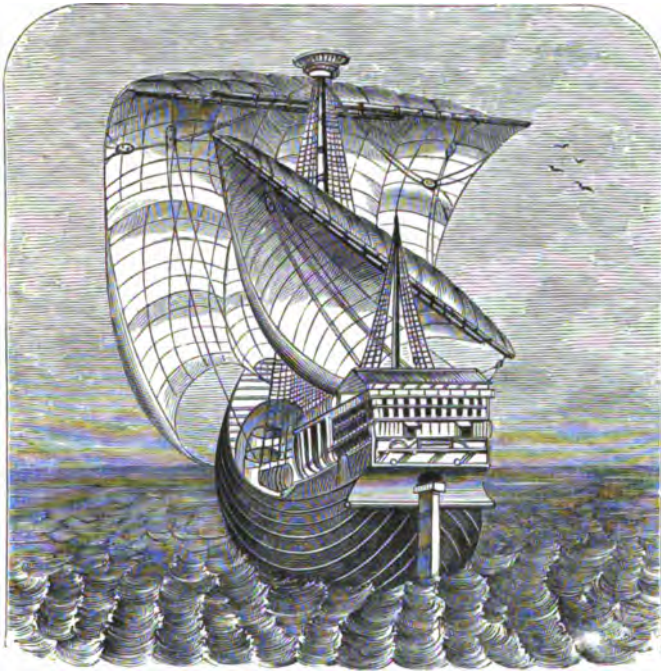


CHINESE RIVER BOAT.

The junk in question had three masts, and there was a gay assortment of flags and streamers flying from them. The mat sails were held up by a great many ropes—there being a rope to each section where the bamboo poles ran across. There was a great advantage in this arrangement, as it enabled the sailors to shorten sail in case of an increasing wind by simply lowering it till one of the sections could be taken in. And when they wish to furl the sail altogether, they have only to let go and the whole thing comes “down with a run.” The construction of the sails can be better understood by reference to the picture here presented of a boat such as the Chinese use for river navigation.

As the *Danube* steamed on down the river and out to sea the conversation between the boys and Doctor Bronson turned very naturally upon ships and their peculiarities.

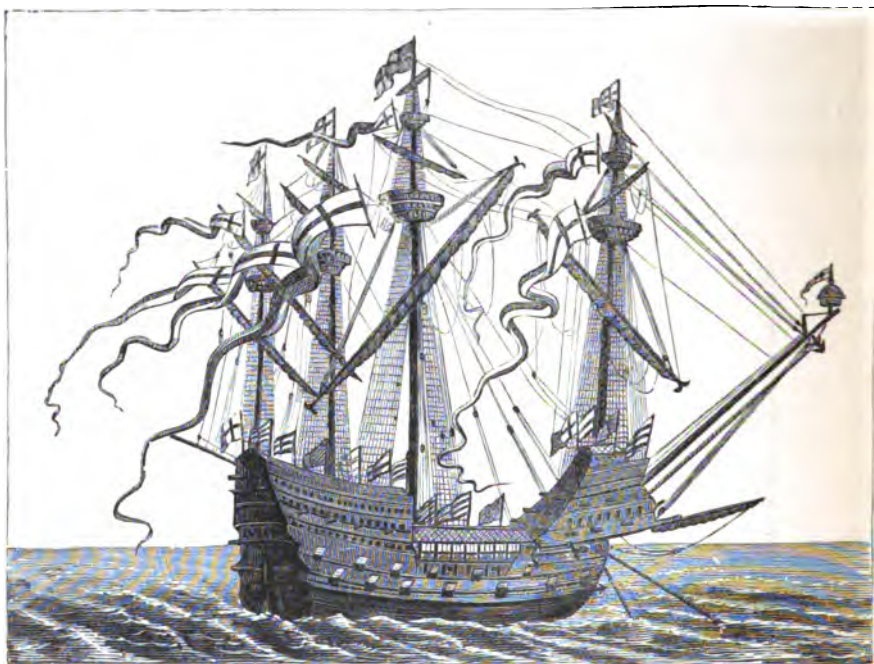
"The difference between us and the Chinese in the matter of ships is that we have progressed, while they have remained stationary. Their junks are of the same pattern as they were a thousand years ago, while we are making changes every year. Look at a picture of a European ship of the fourteenth century, and see how closely it resembles a Chinese junk. Both the bow and stern are very far out of water, and the arrangement of the sails is quite Chinese in its character. About the



SHIP OF THE FOURTEENTH CENTURY.

year 1520 the English built a war ship which they called the *The Great Harry*, and it was considered a wonderful specimen of naval architecture. Who would venture to sail in her now, and how long would it take a war steamer of 1880 to send her to the bottom? Compare *The Great Harry* with the *Tennessee*, which is one of the recent American ships, and observe the progress that has been made in three centuries and a half. The bow and stern have been brought to a level, and the shape

of the hull is such that the ship glides through the water instead of plunging over it. Navigators have found that the ship that makes the least 'fuss' while in motion is the best, and they have devoted a great deal of study to finding the proper shape for the least resistance."



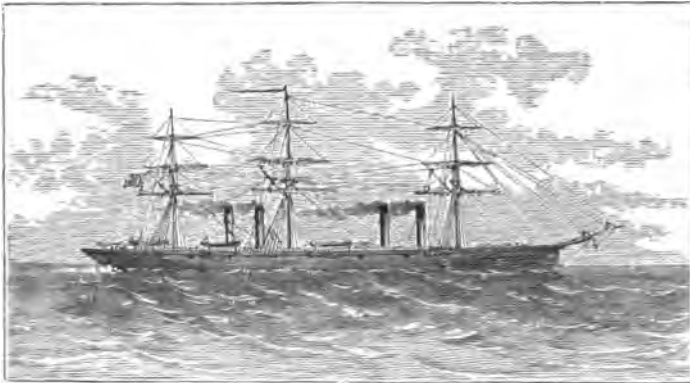
"THE GREAT HARRY."

"Yes," remarked Captain Clanchy, who was standing near, "and it took them a long time to find that the shape of the stern of a ship was almost as important as that of her bow, in regulating her speed. A square stern makes a great boiling and depression in the water, while a long tapering stern allows the water to close silently and with the least possible resistance. You can easily illustrate what I mean by taking a stick of wood that is square at both ends, and tying a string to it so as to drag it endwise in the water. You find that it moves easier when the forward end is sharpened than when both ends are blunt, and then if you sharpen both of them you find it moves still more easily. This is what the naval architects were a long time discovering, and the most of them are wondering why they did not think of it before."

"Then, too," said Doctor Bronson, "it was found that by lengthen-

ing a ship of the old model a great deal was gained. This has been done in the last ten or fifteen years, and many of the steamers now running between New York and England have been lengthened in this way. They have not been built on at either end, but have been cut in two in the centre, and had a new section built in. A ship to be lengthened would be placed on the ways, and then cut open in the middle. If she was to be extended a hundred feet, the two ends would be drawn apart for that distance, and then the space would be filled up. She might be two hundred feet long when taken on the ways, and without any change of bow or stern her length would be increased to three hundred feet. With this addition to her tonnage she is much more valuable than before, and her original speed can be maintained with only a small addition to her power. Then there have recently been great improvements in the construction of engines; and I think it safe to say that what with changes in length, engines, and some other things, a ship of a given number of tons can be run for half the expense that was required twenty years ago. Steam navigation is now so economical that it is rapidly driving sailing vessels from the ocean. The number of sailing ships on long voyages is diminishing every year, and that of steamers is increasing."

"What is the greatest speed that steamers can make nowadays, with all these improvements?" Frank asked.

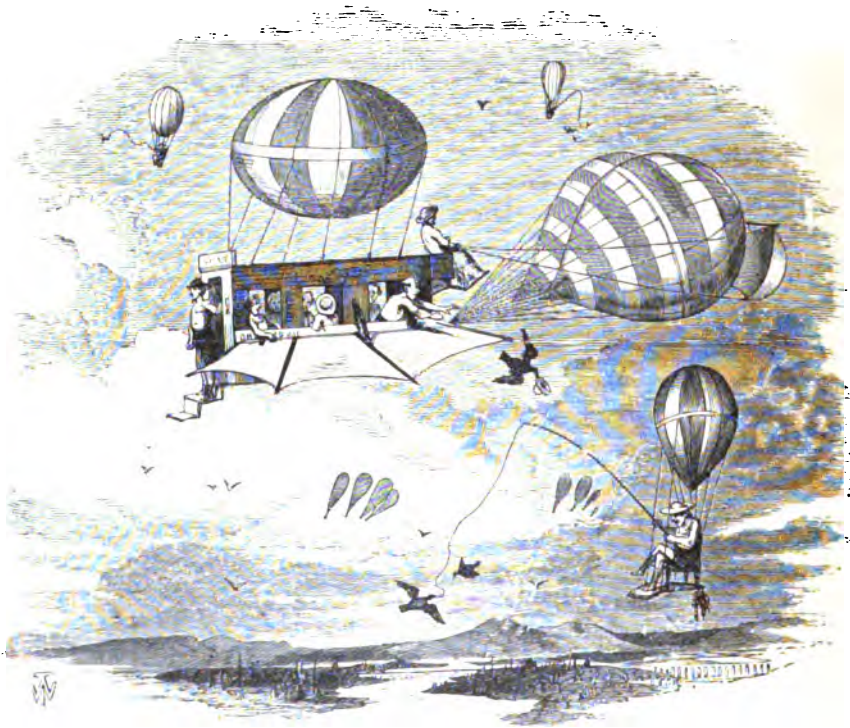


THE "TENNESSEE."

"There is much dispute," Doctor Bronson replied, "over the performances of ships at sea, and it is not at all easy to get at the actual facts. Take the great steam lines between New York and Liverpool, and there are two or three of them that claim to have done better than



any of their rivals. The managers of the White Star Line can show that their ships have made the voyage quicker than the Inman steamers, and the Inman managers can as readily prove that their ships have surpassed all others. There are several steamers afloat that have made more than four hundred miles in twenty-four hours, but they can only do it when all the circumstances are favorable. There are many men who believe that steamers will be built before the end of this century that will make



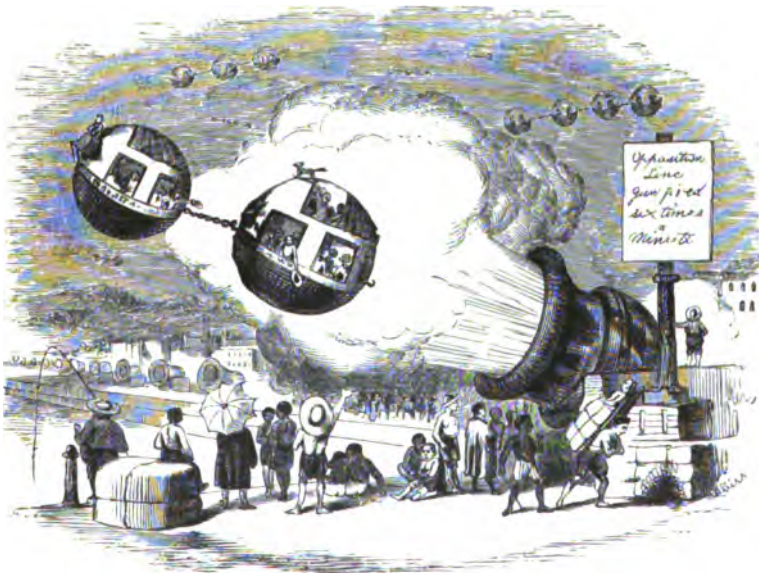
THE PUBLIC HIGHWAY OF THE FUTURE.

five hundred miles in a day, and if we judge of the future by the past, I see no reason to doubt that the feat will be accomplished. We may yet come to the speed of a railway train on the water, and more than one inventor believes that he can do so. The prediction that we will yet cross the Atlantic in three days is no wilder than would have been the prediction, at the beginning of this century, that we could travel on land or sea at our present rate, and that intelligence could be flashed along a wire in a few seconds of time from one end of the world to the other. The railway, the ocean steamer, the telegraph, the telephone, and

many other things that seem almost commonplace to us, would have been regarded as the emanations of a crazy brain a hundred years ago."

"Perhaps," said Fred, "the year 3000 may find us travelling in the air as freely as we now travel on land."

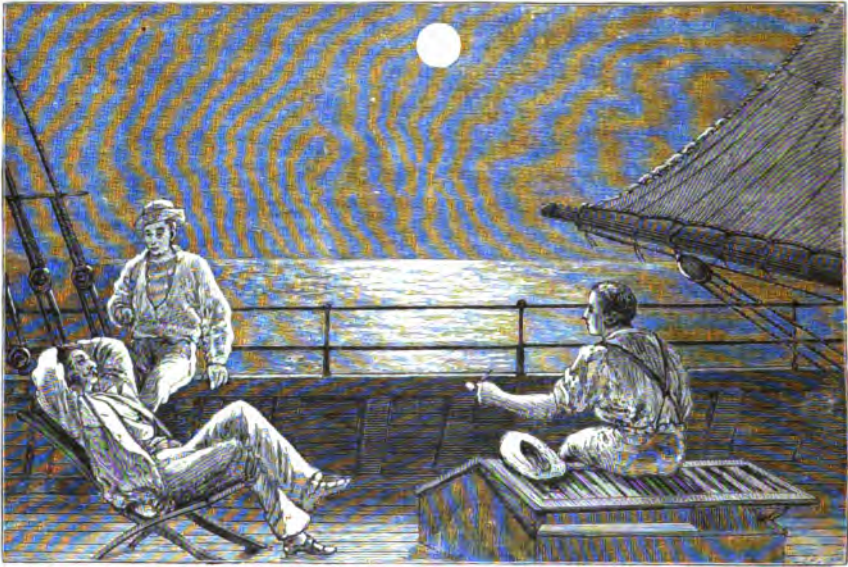
"Not at all impossible," the Doctor answered. "We, or our descendants, may be able to go through the air at will, and show the birds that we can do as much as they can. Not long ago I was reading a sketch which was supposed to be written a thousand years hence. The writer describes his travels, and gives a picture of the public highway. An omnibus supported by balloons, and drawn by a pair of them—harnessed as we would harness horses—is represented on its way through the air. The driver is on his box and the conductor at the door, while the passengers are looking out of the windows. A bird, who has doubtless become thoroughly familiar with the aerial craft, has seized the hat of a passenger and flies away with it, and the victim of the theft is vainly stretching his hands towards his property. Balloons are sailing through the air, and in one a man is seated, who is evidently out for a day's sport. He has a rod and line, and is industriously occupied in birding, just as one might engage in fishing from the side of a boat. A string of birds hangs from the seat of his conveyance, and he is in the act of taking a fresh prize at the end of his line.



THE BOMB FERRY.



"There is another picture representing the ferry of the future. It consists of an enormous mortar, from which a couple of bombs have been fired; they are connected by a chain, and each bomb is large enough to contain several persons. The passengers are supposed to be quite comfortable, and to be whizzed through the air at the speed of a cannon-shot."



MOONLIGHT AT SEA IN THE TROPICS.

"But, of course, such a thing is impossible," said Fred; "nobody could stand it to be shot through a tube at that rate."

"But something very much like it has been proposed in all seriousness; a few years ago an inventor in New York had a scheme for a line of tube four or five feet in diameter, and extending to the principal cities of the land. His cars were to consist of hollow globes or spheres, and they were to be propelled at a very rapid rate by exhausting the air in front of them. His plan was regarded as quite visionary, but it is not at all impossible that it may yet come into use. Small pneumatic tubes are in successful operation for the transmission of letters and little parcels; and in London there is a tube four feet in diameter from the General Post-office to a railway station more than two miles away. The mail-bags are transported through this tube, and on several occasions men have taken their places in the carriages and enjoyed the sensation of this novel mode of travel."

The steamer held her tortuous way down the Mekong, and at length she passed the light-house and went out to sea. The weather was delightful, though a trifle warm, and the three passengers found the cabin oppressive at times on account of the closeness of the atmosphere. A good deal of their time was passed on deck both by day and by night, and, as the moon was then at the full, the night on deck was thoroughly enjoyable. Occasionally they were joined by the captain, and, as he possessed a good fund of marine stories, the boys picked up a great deal of information of a varied character. As they were bound for Siam, they overhauled their trunks for all the books they possessed on that country, and happily they found several volumes in the captain's library that were of use to them. Among them was the account of Marco Polo and his travels in the East. What our friends found in the work in question we will reserve for the next chapter.



A STORY OF THE SEA.

## CHAPTER VII.

## THE WONDERFUL STORY OF MARCO POLO.

“**W**HAT do you make out of Marco Polo’s book?” said the Doctor to the boys, after they had devoted a sufficient time to its perusal.

“We find it very interesting,” Frank replied. “The style is quaint, and the information it contains is curious. Evidently it is a true story, and the man must have actually gone over the ground he describes, or it would never be so accurate.”

“It is some time since I read it,” responded Doctor Bronson, “and perhaps you had best tell me about it. By so doing you will refresh my memory, and at the same time fix the information in your own minds.”

Thus encouraged, the boys proceeded to tell the story of Marco Polo to Doctor Bronson, just as though he had never heard it. The Doctor was a patient listener, and both Frank and Fred showed, by the completeness of their account, that they had thoroughly read the book.

“To begin with,” said Frank, “Marco Polo was a Venetian adventurer. His father was named Nicolo Polo, and he—Marco—had an uncle named Maffeo. Marco was born in the year 1254, and six years later his father and uncle started on a journey to Constantinople and the southern part of Russia. They were merchants, and their business carried them into Central Asia, and then to Cathay, where they spent some time with the khan, or emperor, of that country.”

“And what is Cathay?” said Dr. Bronson, with a smile.

“Cathay is the ancient name for China,” Fred answered, “and even to-day it is sometimes called so. Do you remember how Tennyson, in one of his poems, says,

“‘Better fifty years of Europe than a cycle of Cathay;’

and I am sure you once told me that the Russian name of China is ‘Kitie,’ with the accent on the last syllable. That is pretty near the sound of Cathay, and undoubtedly came from it.”

"Quite correct," the Doctor responded; "you have a good memory both for facts and poetry."

"Kublai-Khan, the Emperor of Cathay," Frank continued, "had never before seen a gentleman from Europe. He was delighted with the Venetians, and greatly interested in the stories they told him about Europe and its countries and customs. How long they remained there we do not know, but it is certain that the emperor, Kublai-Khan, determined to send them as ambassadors to the Pope, who was then the greatest monarch of Europe. Accordingly, he wrote letters to the Pope asking him to send a large number of educated missionaries to Cathay to convert the people to Christianity. These he intrusted to the two Polos, and sent with them an officer of his own court.



MARCO POLO.

"Before they started on their mission he gave them a golden tablet, upon which there was inscribed an order for them to receive everything they might desire for their comfort and convenience in the countries through which they might pass; and his last order to them was 'to bring



back to him some oil of the lamp which burns on the sepulchre of our Lord at Jerusalem.' On the road the Tartar prince who accompanied them fell sick, and they were obliged to leave him behind. If the truth were known, it is quite probable he did not wish to make the journey, and was glad of an excuse for avoiding it.



THE GREAT KHAN DELIVERING A TABLET TO THE ELDER POLO BROTHERS.

(From a Miniature of the Fourteenth Century.)

"In 1269 the brothers arrived at Acre, in Palestine, and found that the Pope, Clement IV., had died the year before, and no new one had been chosen. So they went to Venice to see how matters stood in that city, and to get some news of their families. Nicolo found that his wife had died during his absence, and his son Marco was a fine youth of fifteen years.



ARMS OF THE POLO FAMILY.

"They waited at Venice for two years; but the College of Cardinals could not agree on a new Pope, and consequently the Church was without any head to whom they could deliver their letters. Fearing that the Great Khan would be displeased at their long absence, and believe them faithless to their trust, they determined to return to him and explain the state of affairs. Accordingly, they started in 1271, taking young Marco with them, and in due time were once more at Acre. Before they left the coast for the interior, they learned that a new Pope had been chosen. The man on whom the choice fell was then in Syria, and so they were able to carry out the khan's commission, and

get a reply. But he was only able to give them two priests to accompany them to Cathay, and these soon found a reason for declining to go to the strange land. So the three Polos set out alone for the dominions of the Great Khan.



NICOLO POLO, FATHER OF MARCO.

“With the letters, presents from the Pope to the khan, and the holy oil from Jerusalem, they took the route by Sivas, Mosul, and Bagdad to Hormuz, where they turned north and went through Bokhara, Persia, and



by way of Kashgar, Yarkand, and Khoten. Then they went to the desert of Gobi, and, after crossing it, reached the territories of the khan near the great wall of China. They had been three years and a half on the journey, and the date of their arrival at the khan's court is supposed to be 1275.

"The khan was greatly pleased to see them, and he was especially delighted with young Marco, to whom he seemed to take very kindly. Marco, in his turn, sought to win the favor of the emperor by making himself as useful as possible; he studied the Oriental languages, and in a little while he could speak and write no less than four of them.

"The emperor soon began to employ him in the public service, and he acquitted himself so well that he was sent in charge of missions to distant countries. His first mission was to the province of Yunnan, and in going there he was obliged to pass through several other provinces. He had noticed, during his stay at court, that the emperor was very fond of hearing about strange countries and their manners and customs, and so he took good care to bring back as much information as possible. The khan complimented him for his learning, and found him a great contrast to the commissioners, who could never tell anything except the business on which they had gone.

"We don't know much about the details of his employment while he was at the court of the emperor," said Frank, "but we are told that he was for three years governor of the great city of Yangtchoo; and we also learn that he was in Tangut for a year or more, and that he went on missions to Mongolia, to Cochin China, and other regions, and commanded expeditions to the Indian seas. What his father and uncle were doing all this time we do not know, except that the evidence shows they were making themselves rich. Perhaps they were able to obtain good contracts through the influence of Marco; and if they could get a monopoly of government contracts for a few years, they would have no difficulty in piling up a large fortune.

"Thus they remained at the court of the khan for eleven years, and by-and-by they wanted to go home and enjoy their wealth. But the khan would not listen to it, and perhaps they would never have been heard of again if it had not been for an accident.

"Arghun-Khan of Persia, a great-nephew of Kublai-Khan, had lost his wife, and her dying injunction was that her place should be filled by a lady of her own kin—the Mongol tribe of Bayant. An embassy came to Kublai's court with the request, and the choice fell on Lady Kukachin, who is described as a most beautiful woman. The overland road to Per-

sia was considered dangerous, and it was determined to send her by sea. Accordingly, the khan fitted out an expedition in fine style, and, as the Venetians were well acquainted with navigation, while the Tartars were ignorant of it, the khan concluded to send the Polos with the fleet. He was reluctant to let them go; but having once determined to do so, he gave them a great many fine presents, and intrusted them with messages to the various sovereigns of Europe, including the King of England. They appear to have sailed from the Port of Zayton in the early part



PORTRAIT OF KUBLAI-KHAN.

(From a Chinese Engraving.)

of 1292. The voyage was long and unfortunate, and the greater part of the embassy and suite perished on the way. The lady and the three Venetians arrived safely in Persia, where it was found that her intended husband had died, and so she was compelled to marry his son.

“As soon as their mission had ended, the Polos proceeded to Venice,

which they reached in the year 1295. Their long absence had caused them to be well-nigh forgotten, and very few people could be found who remembered anything about the Polos. They had changed much in their complexions, had almost forgotten their own language; all their utterances had a decidedly Tartar accent; and they were so travel-stained and shabby that they had difficulty in being received in their own house, which was now occupied by relatives.

"In order to establish their identity, the wanderers invited their relatives to a grand banquet. When the time came for sitting down at table, the three appeared in robes of crimson satin; a little later they exchanged these for robes of crimson damask, and these again for the richest velvet of the same color. Afterwards they dressed in clothing like that of the rest of the company, and each of the crimson robes, as soon as it was laid aside, was cut up and given to the servants.

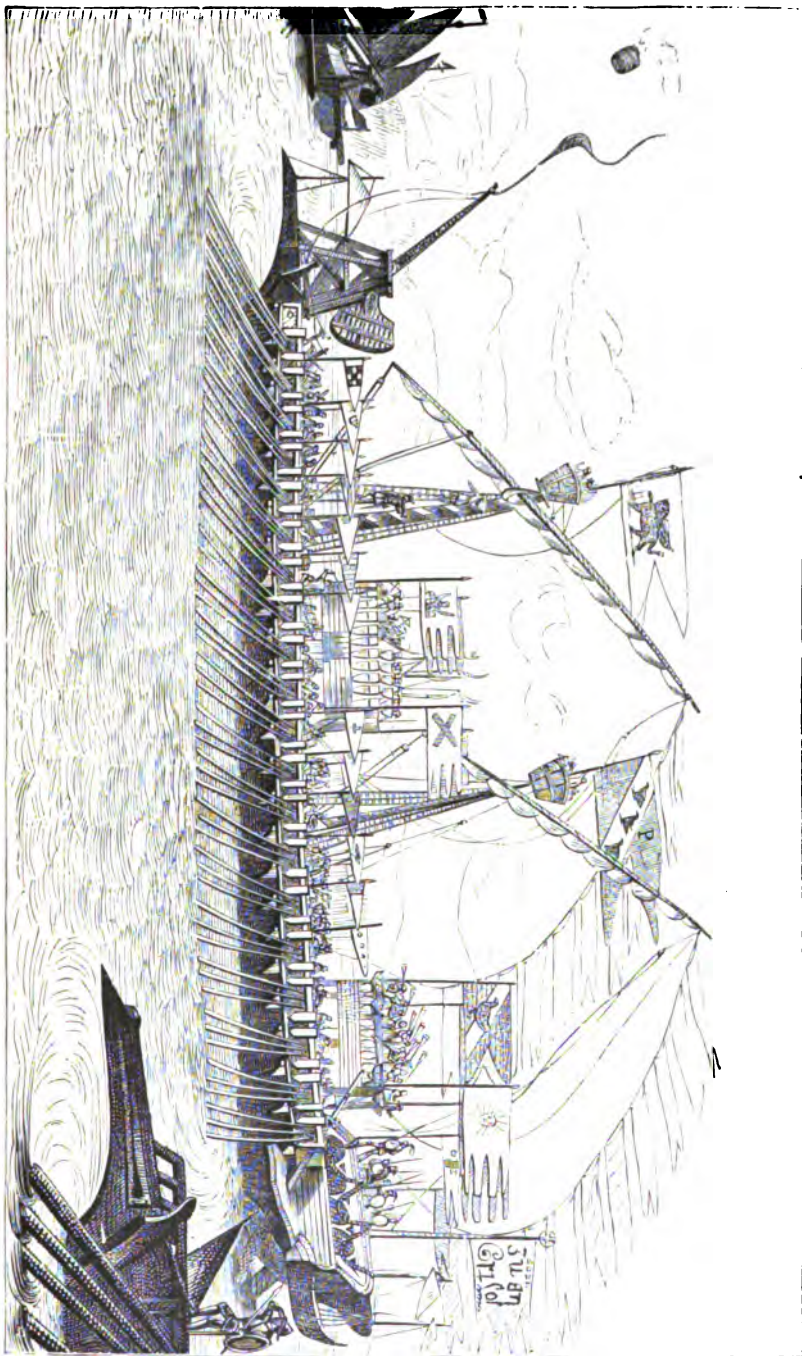
"Just as the dinner was breaking up, Marco rose from the table and retired for a moment. When he returned, he brought the shabby dresses they had worn on their arrival, and the three Polos then went to work with knives to rip open these apparently worthless garments. As they cut away the seams, showers of great diamonds of the purest water, and also emeralds, pearls, rubies, sapphires, and carbuncles, fell on the table.

"There could be no further doubt about the relationship; everybody at table was ready to swear that he was father, son, and brother all at once to any of the trio. Relatives poured in on them in great numbers, and all Venice rushed to do them honor. They were appointed to offices of high trust, and the young men of Venice came to hear Marco tell of the wonders he had seen in his long absence. They were the most popular men in the city, and received more invitations to dinner than they could accept.

"There is a tradition that the wife of one of the Polos one day gave a beggar an old coat belonging to her husband, as she considered it too shabby for him to wear any longer. When he asked for it the next day, in order to put away the jewels it contained, she told him she had given it to a poor man whom she did not know. The tradition says, 'He went to the Bridge of Rialto, and stood there turning a wheel, to no apparent purpose, but as if he were a madman; and to all who crowded around to see what prank was this, and asked him why he did it, he answered, 'He'll come, if God pleases.' So, after two or three days, he recognized his old coat on the back of one of those who came to stare at his mad proceeding, and got it back again.'

"Soon after his return, an expedition was sent from Venice against

MARCO POLO'S GALLEY IN BATTLE.



Genoa, and Marco was placed in command of one of the ships or galleys. A great battle was fought; the Venetians were defeated; Marco was captured, placed in irons, and lodged in a prison at Genoa. While in captivity, he told the story of his travels to a fellow-prisoner named Rusticiano or Rustichello, of Pisa, and the latter committed it to writing. It was fortunate for us, though not so for him, that Marco Polo was in prison, as otherwise we might never have had an account of his travels. After his release, he led a quiet life at Venice, and seems to have died not far from the year 1325. He was buried in the Church of San Lorenzo; but all trace of his tomb was lost when that edifice was rebuilt.

"Now it is Fred's turn," said Frank; "I have told the history of Marco Polo, and shown why and how he went to the East; Fred will give you an account of what the great traveller saw in his absence from Europe of nearly twenty years."

Fred drew his note-book from his pocket and proceeded to his share of the entertainment.

"Marco Polo's work," said Fred, "consists of four divisions or books and a prologue. The prologue opens as follows:

"Great princes, emperors, and kings, dukes and marquises, counts, knights, and burgesses, and people of all degrees, who desire to get knowledge of the various races of mankind, and of the diversities of the sundry regions of the world, take this book and cause it to be read to you. For ye shall find therein all kinds of wonderful things, and the divers histories of the great Hermania, and of Persia, and of the land of the Tartars, and of India, and of many another country of which our book doth speak particularly, and in regular succession, according to the description of Messer Marco Polo, a wise and noble citizen of Venice, as he saw them with his own eyes. Some things, indeed, there be therein which he beheld not; but these he heard from men of credit and veracity. And we shall set down things seen as seen, and things heard as heard only, so that no jot of falsehood may mar the truth of our book; and that all who read it or hear it read may put full faith in the truth of all its contents."

"It is hardly worth while to read the whole prologue to you," Fred remarked, "as it is long, and we can only give a general glance at the contents of the whole work. A great many editions of the travels of Marco Polo have been published; the most valuable of all is the latest, which is by Colonel Yule, an English officer who spent a long time in India. He has made a careful study of the subject, and his work, with explanatory notes, is as complete as years of labor could make it. Indeed,

there are more pages taken up with the explanatory notes than with the original text of Marco Polo.

"The four divisions or books give an account of the various countries he visited in his years of wandering, and of the wonderful sights he beheld. The route he followed can be traced by geographers without difficulty, and the cities he visited have most of them been identified. Many have had their names changed, and some have disappeared altogether, so that in a few instances the localities are in dispute. But, taken as a whole, the story is a truthful one, and shows Marco Polo to have been the greatest traveller of his time.

"Some of the stories that seem at first to be the wildest fiction are known to be founded in fact, if not literally correct. In speaking of Syria, he says: 'There is a great lake at the foot of a mountain, and in this lake are found no fish, great or small, throughout the whole year till Lent comes. On the first day of Lent they find in it the finest fish in the world, and great store, too, thereof; and these continue to be found till Easter-eve. After that they are found no more till Lent comes round again; and so 'tis every year.'

"Colonel Yule is unable to locate the particular lake mentioned, but says there are several lakes in different parts of the East that are deserted by the fish for certain periods of the year. It would not be at all strange if such were the case, and a very little exaggeration of the story would make the fish appear in Lent, and go away at other times.

"While describing Baudas—the modern Bagdad—he tells how an army, under Prince Alau, captured the city, and found the greatest accumulation of treasure that ever was known. The prince was enraged at seeing so much wealth, and asked the caliph why he did not take the money to hire soldiers to defend the city. 'The caliph,' says Marco, 'wist not what to answer, and said never a word. So the prince continued, "Now then, caliph, since I see what a love thou hast borne thy treasure, I will e'en give it thee to eat." So he shut the caliph up in the treasure-tower, and bade that neither meat nor drink should be given him, saying, "Now, caliph, eat of thy treasure as much as thou wilt, since thou art so fond of it, for never shalt thou have aught else to eat!"'

"So the caliph lingered four days in the tower, and then died. The story has been used by several poets both in England and America, and it has been made the basis of an Eastern romance.

"Some of the more fanciful stories he tells are about the men of Lambri, and of Angamanain. Here is what he says of the former:

"'Now you must know that in this kingdom of Lambri there are



men with tails; these tails are of a palm in length, and have no hair on them. These people live in the mountains, and are a kind of wild men. Their tails are about the thickness of a dog's. There are also plenty of unicorns in the country, and abundance of game in birds and beasts.'



ALAU SHUTS UP THE CALIPH OF BAUDAS IN HIS TREASURE-TOWER.

"The story is not very definite," Frank suggested, "as there is a great difference in the size of dogs' tails. The range from a terrier or pug to a mastiff or a Siberian blood-hound is pretty wide. It reminds me of the stone thrown at a man, that was described by a witness as about the size of a piece of chalk."

"By the island of Angamanain," Fred continued, "Polo probably meant the Andaman Islands. Here is what he says of them :

"The people are without a king, and are idolaters, and no better than wild beasts. And I assure you that all the men of this island of Angamanain have heads like dogs, and teeth and eyes likewise! In fact, in the face they are just like big mastiff dogs! They have a quantity of spices; but they are a most cruel generation, and eat everybody they can catch, if not of their own race. They live on flesh and rice and milk, and have fruits different from ours.'

"Now, the fact is," Fred explained, "that the natives of the Andaman Islands have a bad reputation. Down to the present time they have been repeatedly charged with murdering the crews of ships that were wrecked there; and it is only recently that their cannibalism has been denied. They are very black, and not at all handsome in face or figure; and out of these facts I suppose the story came that they had heads like dogs.

"He describes a fountain in the kingdom of Mosul, 'from which oil springs in great abundance, insomuch that a hundred ship-loads might be taken from it at one time. This oil is not good to use with food, but 'tis good to burn, and is also used to anoint camels that have the mange.' Evidently they had petroleum in Asia six hundred years ago, as we have it in America to-day, and thought we had made a new discovery.



DOG-HEADED MEN OF ANGAMANAIN.

"He speaks of oxen 'that are all over white as snow, and very large and handsome. When they are to be loaded they kneel like the camel; once the load is adjusted, they rise. Then there are sheep as big as asses; and their tails are so large and fat that one tail shall weigh more than thirty pounds. They are fine fat beasts, and afford capital mutton.'

These fat-tailed sheep are known in Asia and Africa, and the weight he gives is said not to be excessive.

"In one place there is an account of the posting system of the Great Khan of Tartary, which seems to have been more perfect than the posting system of Europe at the same date. From Kambaluc, the capital—now known as Peking—the roads branched in all directions, and 'each road,' says Marco, 'is known by the name of the province to which it leads. And the messengers of the emperor, in travelling from Kambaluc, be the road whichever they will, find at every twenty-five miles of the journey a station which they call *Yamb*, or, as we would say, the Post-horse-house. And at each of those stations used by the messengers there is a large and handsome building for them to put up at, in which they find all the rooms furnished with fine beds, and all other necessary articles in rich silk, and where they are provided with everything they can want. If even a king were to arrive at one of these, he would find himself well lodged. At some of these stations there shall be posted more than 400 horses, standing ready for the use of messengers; and at some 200, according to the requirements. \* \* \* There are more than 300,000 kept at all these posts, and more than 10,000 great buildings for the use of messengers.'"

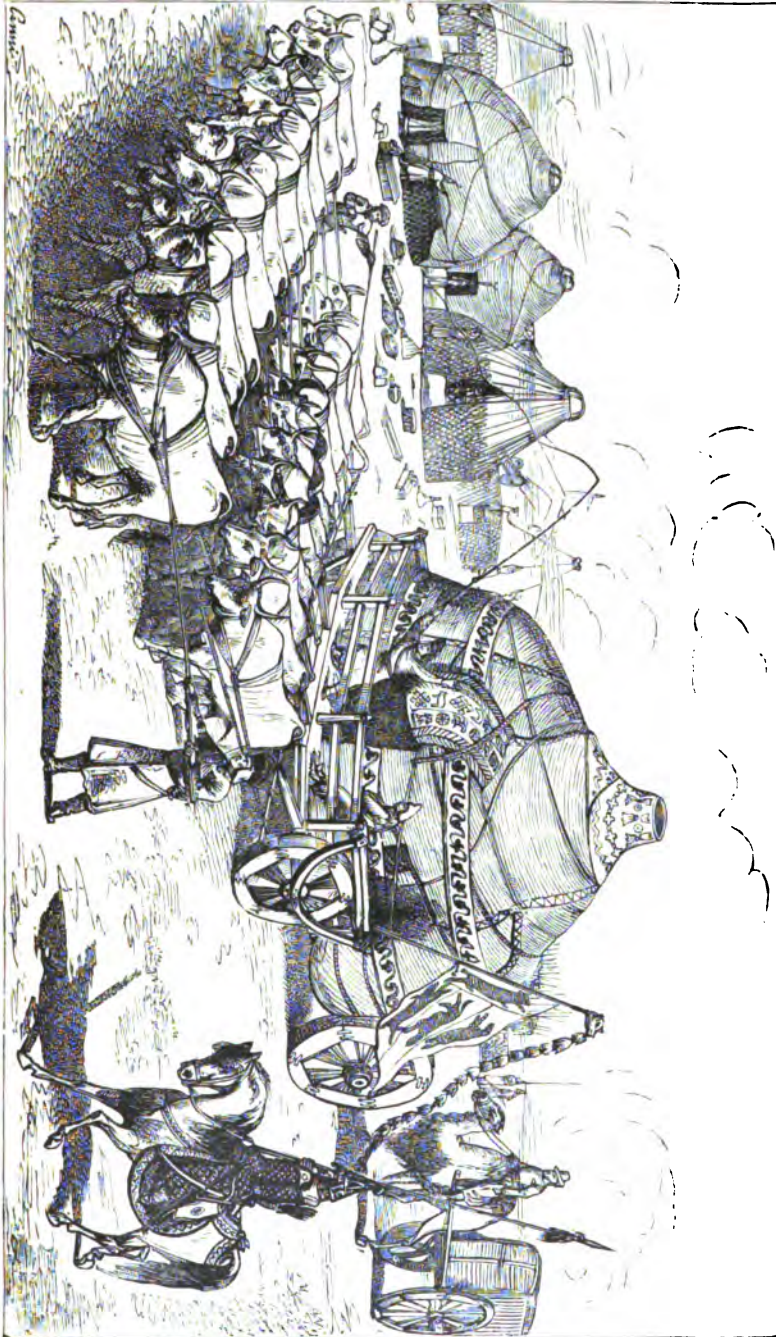
"How much China has declined since the days of Marco Polo," Frank remarked. "The great buildings and the silk beds do not exist; and as for the horses, we were unable to find them at the posting-stations, or even to find any stations where they might be kept."

Fred took breath during this interruption, and then went on with the story of what Marco Polo claimed to have seen.

"'The houses of the Tartars,' says Marco, 'are made of wands covered with felt. These are carried along with them whithersoever they go. They also have wagons covered with black felt so efficaciously that no rain can get in. These are drawn by oxen and camels, and the women and children travel in them. They eat all kinds of flesh, including horses and dogs and Pharaoh's rats. Their drink is mares' milk.' This account is confirmed by other writers; and the houses of the Tartars are made to-day as Polo describes, though they are not drawn about on wheels. One ancient writer says that he measured one of the Tartar wagons, and found that the wheels were twenty feet apart, and it was drawn by twenty-two oxen, eleven abreast.

"He has a good deal to say," Fred continued, "about the famous bird known as the roc, or rukh. He does not claim to have seen one of these birds, but was informed by persons who had done so. According to his





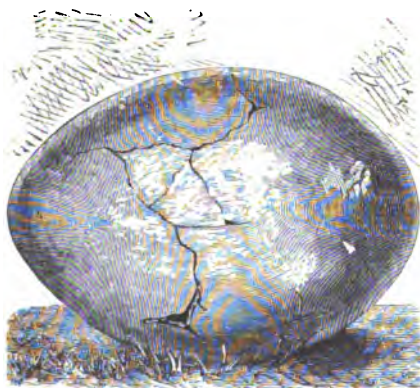
MEDIEVAL TARTAR HUTS AND WAGONS.

account, 'It was for all the world like an eagle, but one, indeed, of enormous size; so big, in fact, that its wings covered an extent of thirty paces,



THE ROC, FROM A PERSIAN DRAWING.

and its quills were twelve paces long, and thick in proportion; and it is so strong that it will seize an elephant in its talons and carry him up in the air and drop him, so that he is smashed to pieces; having so killed him, the bird swoops down on him and eats him at leisure.'



ROC'S EGG, NOW IN THE BRITISH MUSEUM.

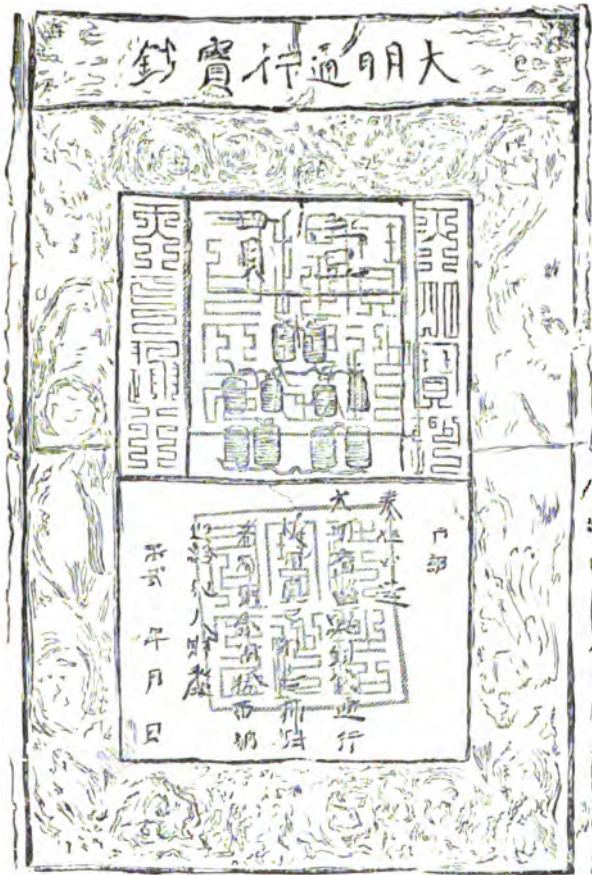
"In a note explaining this story, Colonel Yule says there was once a bird in Madagascar, where Polo places the roc, that was much larger than any known bird of the present day. Its eggs have been found in a fossil state, and one of them is preserved in the British Museum. It measures thirteen and a quarter by six and a half inches (length and width), and the capacity of the shell is nearly three and a half gallons.

It was undoubtedly from this bird that the fable of the roc arose."

Frank ventured to ask Fred if he had found from Marco Polo's book

what kind of money was used in China at the time he visited that country.

"I am just coming to that," Fred answered. "Polo says that the great emperor, Kublai-Khan, was a wonderful man. 'He transformed the bark of the mulberry-tree into something resembling sheets of paper, and these into money, which cost him nothing at all, so that you might



CHINESE BANK-NOTE OF THE MING DYNASTY.

say he had the secret of alchemy to perfection. And these pieces of paper he made to pass current universally, over all his kingdoms and provinces and territories, and whithersoever his sovereignty extended; and nobody, however important he thought himself, dared to refuse them on pain of death."



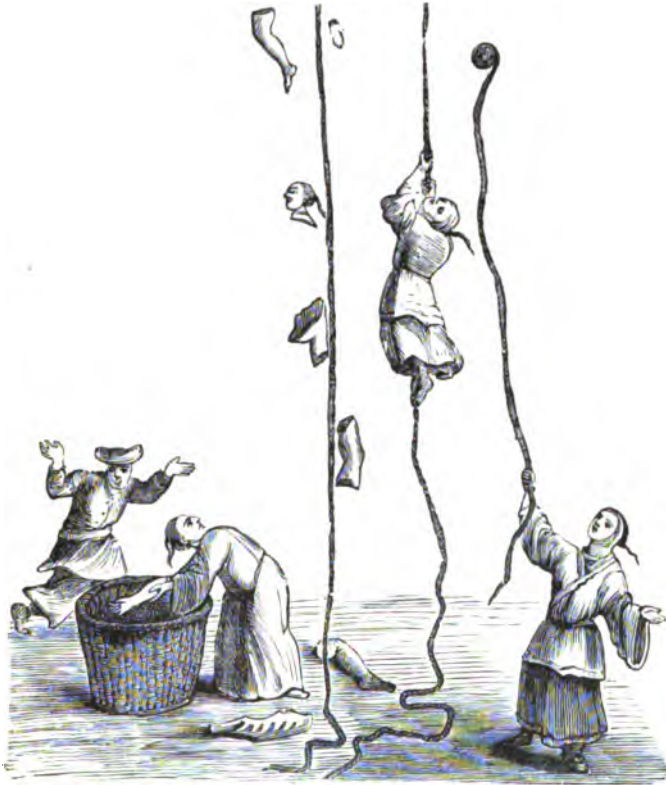
"History repeats itself," said Doctor Bronson; "for many a modern government has made the same laws in order to compel the circulation of its promises to pay."

"And with the same result," Fred responded; "for we learn farther on from Marco Polo that, in spite of the death penalty, the legal-tender issue of the Great Khan was only worth half its nominal value in silver; and the more money he issued, the greater was the depreciation. But the khan was not the inventor of paper-money, for it was known at least four centuries before his time. Its origin is disputed, but the probabilities are that it came from the East."

"Some of the stories that are told about supernatural appearances are very interesting," continued Fred. "In the desert of Gobi, Polo says that the traveller who lags behind his party at night will hear spirits talking, and will suppose them to be his comrades. Sometimes the spirits will call him by name, and thus shall a traveller oftentimes be led astray, so that he never finds his party; and in this way many have perished. And sometimes you shall hear the sound of a variety of musical instruments, and still more commonly the sound of drums."

"He says, in another place, 'When the Great Khan, seated on a platform some eight cubits above the pavement, desires to drink, cups filled with wine are moved from a buffet in the centre of the hall, a distance of ten paces, and present themselves to the emperor without being touched by anybody.'

"Polo describes other magical performances, some of which are partially explained by Colonel Yule. Another traveller relates that a juggler performed some remarkable tricks in his presence; and among them is the following: 'He took a wooden ball with several holes in it, through which loose thongs were passed, and, laying hold of one of these, slung it into the air. It went so high that we lost sight of it altogether. There now remained only a little of the end of a thong in the conjurer's hand, and he desired one of the boys who assisted him to lay hold of it and mount. He did so, climbing by the thong, and we lost sight of him! The conjurer then called to him three times; but getting no answer, he snatched up a knife as if in a great rage, laid hold of the thong, and disappeared also. By-and-by he threw down one of the boy's hands; then a foot; then the other hand, and then the other foot; then the trunk; and, last of all, the head. Then he came down himself, all puffing and panting, and, with his clothes all bloody, kissed the ground, and said something in Chinese. Then he took the lad's limbs, laid them together, gave a kick, when, presto! there was the boy, who got up and stood before us.'"



CHINESE CONJURING EXTRAORDINARY.

"The Indian jugglers are said to do the same trick, or one very much like it," said Doctor Bronson. "I have read a description of one of their performances, in which they took a long chain and threw one end of it in the air, where it remained as if fastened to something. A dog was then brought forward, and ran up the chain and disappeared in the air. In the same way a hog, a panther, a lion, and a tiger were sent up the chain one after the other, and all disappeared at its upper end. Finally they took down the chain, rolled it up and put it in a bag, no one being able to discover how the trick was performed."

"We must come to a stop now," said Fred, "though we haven't heard a tenth part of the strange things in Marco Polo's story of his travels. His account of the Court of Kublai-Khan would take a long time to tell, and perhaps you would get tired of it before I came to the end. So, if you want to know more, you must do as I have done—read for yourself."

The interesting session of the party over the travels of the famous

Venetian were brought to a close. The Doctor complimented the boys on the excellent work they had done in making a condensed account of the book, and said he was so pleased with them that he would give them a similar piece of employment whenever the opportunity occurred.

"It is a capital way," said Fred, "to fix in mind what we have read. I find that I read with greater care when I know I must make a summary of a book than if I am to throw it down when through and think no more of it. I'm very glad we had to go through Marco Polo's history in this way."

"And I too," Frank added. "But it is what we used to dislike so much at school."

"What was that?" Fred asked.

"Why, writing compositions, to be sure," Frank responded. "Don't you remember how we used to detest it?"

"Of course I do," was the answer; "but we always did it without an object. The teacher told us to write something about 'spring,' or 'the beauties of nature,' or some other subject that was not at all definite. Now if he had given us an interesting book to read, and said he wanted



CAPTAIN CLANCHY AT WORK.

us to do with it as we have done with this, we should have 'written a composition' with some relish."

"It will be eight bells soon," the captain interrupted, "and if you want to see me take the sun you had better come forward."

The boys had familiarized themselves with the process of finding a ship's position; but anything at sea that varies the monotony is always welcome. So they went forward with Captain Clanchy, and stood by the rail till that brief performance was ended. Then they retired to the cabin, and watched the operation of working up the steamer's position; and by the time this was over, the steward announced that dinner was ready.



COME TO DINNER!

## CHAPTER VIII.

## ARRIVAL IN SIAM.—FIRST DAY IN BANGKOK.

THE boys found a novel way of taking fresh-water baths during their voyage from Saigon to Bangkok. Nearly every day there was a heavy shower of rain, and sometimes two or three showers in the course

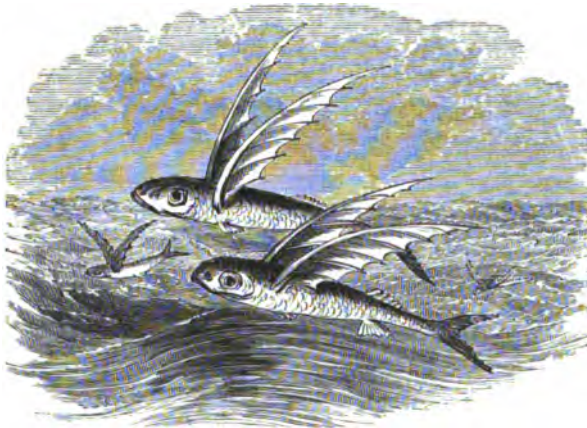


A NATURAL SHOWER-BATH.

of twenty-four hours. The rain came literally in torrents; it poured as though great gates had been suddenly opened in the sky, to allow the passage of the water by dozens of barrels at a time. Neither Frank nor

Fred had ever seen the rain fall so fast; the Doctor assured them that showers of this kind were very common in the tropics, especially during the change of the monsoons.

Whenever the clouds indicated a coming shower, the boys generally went to the cabin and soon appeared in their bathing-suits. Covering their heads with straw hats, to protect them from the pelting of the great drops, they would sit in the rain and enjoy the luxury of the earliest form of shower-bath ever known. One night, when they were sleeping on deck, they were suddenly awakened by the pouring of the rain in their faces, and, before they could gather their clothing and escape to shelter, they were treated to a bath they had not bargained for. It is one of the inconveniences of sleeping on deck in the tropics that you are liable to have your slumbers disturbed in this way, just as you are dreaming of pleasant things, and in no mood for waking.



FLYING-FISH.

Though they were not in sight of land, our friends realized that they were in a comparatively small body of water, and not in the open ocean. The swell and heaving of the Atlantic and Pacific waves were altogether absent; though the steamer was a diminutive one in comparison with the great ships on which they had travelled hitherto, she rolled and pitched very little, and sometimes her motion was as steady as though she was navigating a river. The Gulf of Siam does not occupy a large place on the map, and for a great part of the year it is as peaceful as a lake. The captain told them that it was rarely disturbed by typhoons or severe gales, and was about five hundred miles long by two hundred and fifty in width.



Porpoises and flying-fish appeared occasionally, and their lively leaps from the water were a source of much amusement to the youths.

The first indication of their approach to the coast of Siam was the appearance of a dark line on the northern horizon. As they steamed on, this line developed into a fringe of tropical trees; but before they could make anything more of it than the merest fringe, the steamer came to anchor. As they were still a long way from land, the boys could not understand the reason for stopping, and Fred ventured to ask the captain why they did not go on.



VIEW NEAR PAKNAM.

"The principal reason," the captain answered, "is because we can't. The approach to the river is very shallow, and our steamer cannot cross the bar till high-tide. We must wait here till the tide serves, and we have a pilot to take us in."

The pilot came to the ship soon after they anchored, and in a few

hours he announced that it was time to move on. The anchor was lifted, and the *Danube* steamed slowly onward towards the shore.

Very soon it was apparent to the boys that the waters along this part of the coast were very shallow, as the steamer stirred the mud from the bottom and left a dirty streak behind her. The bar at the mouth of the Menam prevents the passage of large ships, and there was a fleet of half a dozen or more lying outside and receiving their cargo from lighters. Vessels drawing less than fifteen feet can go up without difficulty; and once they have passed the bar, there is no trouble in proceeding on to Bangkok.

"I wonder if that is Bangkok?" said Fred, as he pointed to a conical tower that rose just ahead of them, and apparently a short distance above the mouth of the river.

"Oh no," the captain replied, "that is not Bangkok at all. The city is thirty miles up the river, and what you see now is Paknam. We shall stop in front of it to get the permit from the custom-house to allow us to proceed up the river.

"The tower that you see is a temple on a small island opposite Paknam. It is used on festival days, and once in awhile the king comes down here to worship. On such occasions they have boat-races, and a good time generally; some of the boats are rowed entirely by girls, and the sport is very exciting."

A boat came from the custom-house, and an officer mounted to the deck of the steamer. His visit was a brief one, as the *Danube* was a regular visitor at the port, and did not require any unusual formalities. After a short delay, the steamer moved on under charge of the pilot, though the captain remained on the bridge and kept a sharp watch over the movements of his vessel. It is a curious feature of maritime law that when a ship is in charge of a pilot her captain's authority ceases; but in case of accident he comes in for a liberal share of censure.

The boys found that the Menam was as crooked as the Mekong, and not unlike the latter in its general features. The channel appeared to be free of sand-bars or other impediments to navigation, though some of the bends of the stream were rather short for a large ship to turn in with ease. At one place there was a channel or canal that saved a great distance for small boats; but it was impracticable for the *Danube*, which was obliged to follow the winding of the river. A little tow-boat entered this canal just as they passed the entrance; she steamed leisurely through, and as the *Danube* rounded the bend Frank discovered that the tow-boat was several miles ahead of them.

The river was full of native boats, some going in one direction and some in another. Now and then a house was visible in the dense foliage,



NATIVE HUT ON THE MENAM RIVER.

and there was an occasional cluster of dwellings large enough to be called a village. Many of the houses were built so that a platform in front overhung the water; and the whole structure was on piles, in order to form a refuge against snakes and wild beasts, and also to secure the inhabitants against being suddenly driven out by an inundation.

But what impressed the young travellers more than anything else was the richness of the tropical vegetation along the banks of the river. Here were palms in great variety, and many huge trees whose names were unknown to them; and there was a

dense growth of underbrush, through which it would be very difficult for a man to penetrate unless armed with a hatchet, and not at all easy even then. Many of the trees were covered with creeping and climbing plants, so that not a particle of the surface or foliage of the original tree could be seen, and very often the burden of parasites was so great that the trees had fallen beneath it.

"I have read," said Frank, "about the vines that destroyed a tree, but have never fairly seen an instance of it till now."

"Nor I either," Fred responded. "Look at that fine tree that has been quite broken down by the weight of the plants that cling to it. And observe, too, the bright blossoms that the vine has spread out, as if it was exulting over the destruction it had caused."

Some of the creeping vines had a scarlet flower of a very gaudy pattern, and it seemed as if it was their season for blooming, as the vines in several instances were completely covered with blossoms.

Now and then there were little openings in the forest that looked like pathways. The Doctor told his young companions that these paths undoubtedly led to villages or single houses that were hid away in the dense foliage. The Doctor's belief was confirmed by the glimpse of an occa-



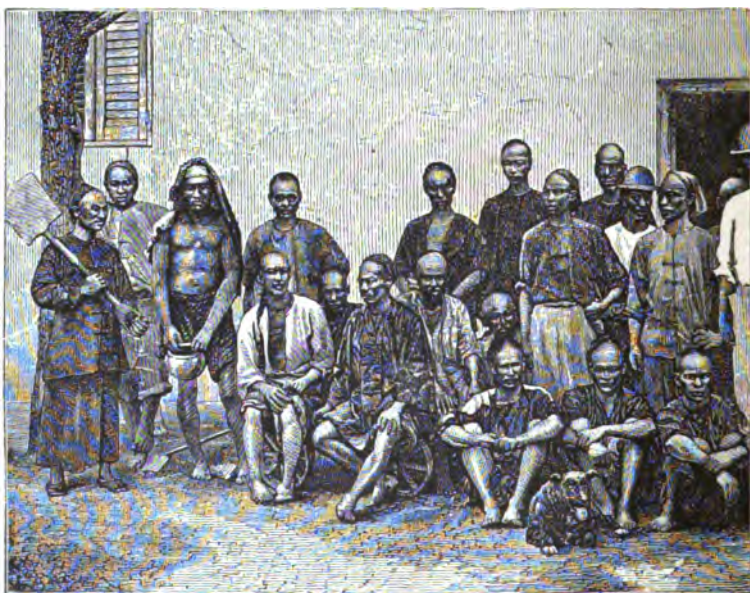
A VILLAGE PATHWAY IN SIAM.



sional figure among the trees, and by dusky faces that contemplated the steadily moving steamer.

But it was not all a tropical forest with occasional villages. There were sugar plantations, some of them of considerable extent; and there were rice-fields where dozens and dozens of men were at work. Frank contemplated a lot of these laborers with the captain's glass, and remarked that the Siamese resembled the Chinese so much that it was impossible to distinguish between them. The Doctor laughed, and then gave this explanation:

"The men that you see are Chinese, and not the people of Siam. Nearly all these rice and sugar plantations employ Chinese laborers; and



CHINESE FIELD-LABORERS.

of the five millions of people in Siam not less than two millions are Chinese. They come here, just as they go to America or to Australia, in search of employment; and, though the wages are low, they are quite content. If you could go to every part of Siam you would hardly ever be out of sight of the Chinese, as they are scattered everywhere through the kingdom. There, now, we will have a good view of some of these laborers."

As he spoke, the steamer swung quite close to the bank, where there was a group of laborers evidently just ready to depart for the rice-field.



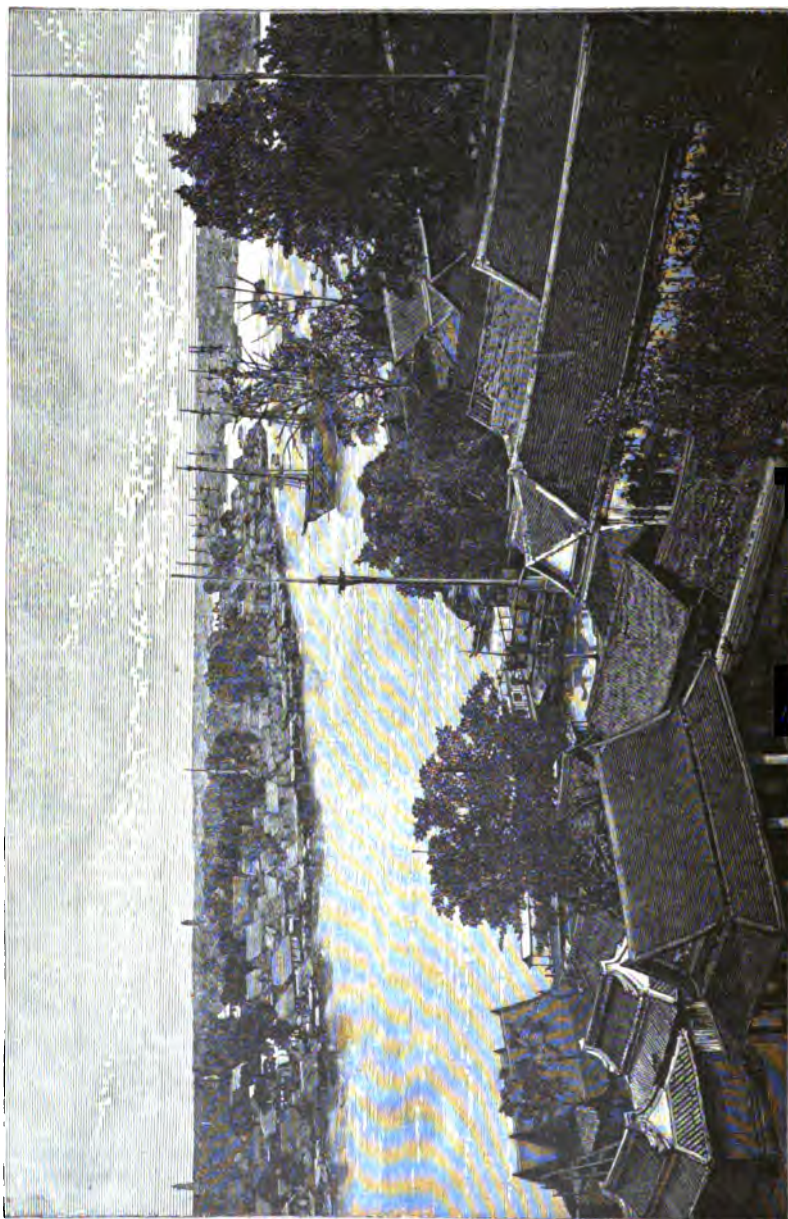
Some were squatted, and some were standing; some were fully and some only partially clothed; and all appeared as though they had the good digestion that comes from hard work. It did not need a long study of the assemblage to convince our friends that the men were exactly like those they had seen in Canton and Hong-kong, and the captain told them that probably every one of the crowd was from the Quang-Tung Province of China.

They were still in the midst of cocoa and other tropical trees, when the captain told them they were at Bangkok. There was a saw-mill and a dock-yard among the trees on one side of the river, and farther on was a large house, with an open space of an acre or more between it and the river. They had reached what may be called the foreign portion of the city; the native part is nearly three miles farther on, and quite concealed by a bend in the stream.

We will see what the boys had to say of Bangkok in their letters to friends at home. Here is what Frank wrote:

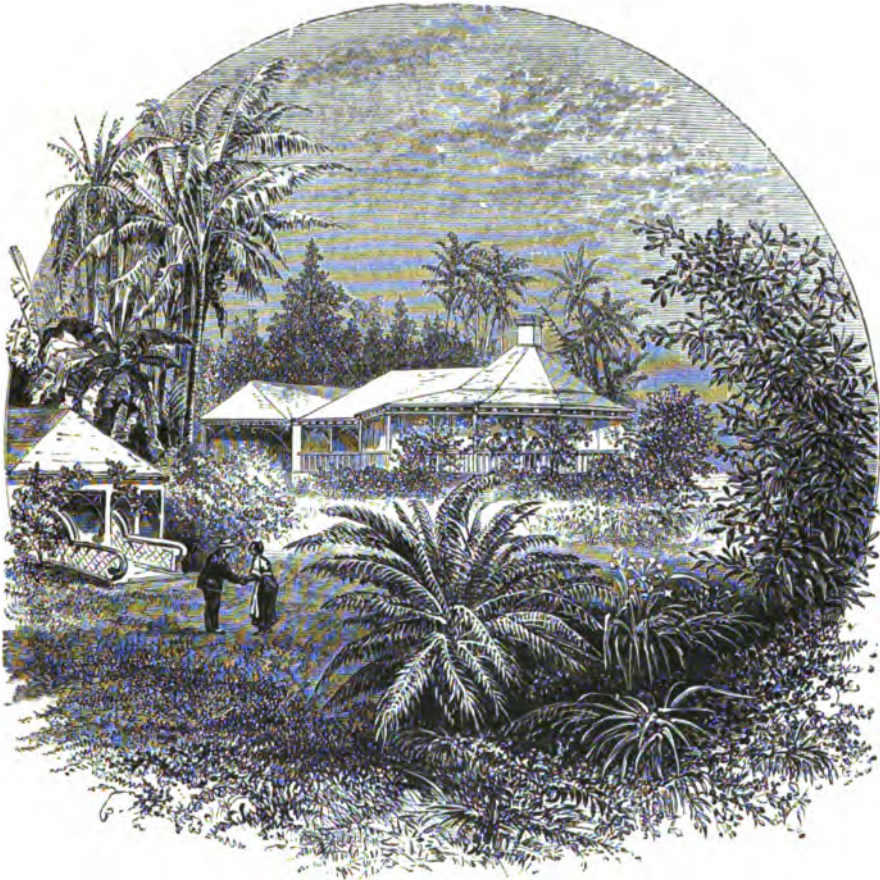
"MY DEAR MOTHER,—We had a charming voyage from Saigon to this port. The weather was fine, and we amused ourselves in various ways; one thing we did was to read up the story of Marco Polo's travels six hundred years ago, and then tell it over to the Doctor. Sometimes it was so hot that we slept on deck, and when it was raining hard we used to go out in our bathing-suits and have a shower-bath that was simply perfect. We had a picturesque ride up the Menam to this city; and we have seen lots of curious things since we landed.

"We came ashore with the captain, and he took us at once to the only hotel in the place. It is a funny sort of a hotel, as you have to go out-of-doors to pass from the dining-room to the sleeping-rooms and the parlor, where we sit when we want to rest. The rooms are not more than ten feet square, and I don't think Fred's will measure as much as that. I made the remark that you couldn't swing a cat around there; and the landlord said he had no cat, and even if he had one he didn't want to swing her anyway. You ought to see the landlord; he is a German, and as jolly as you could wish. He was formerly a sea-captain, and everybody calls him 'Captain Salje.' He must weigh pretty nearly three hundred pounds, and when he laughs he shakes all over. He speaks English as well as German, and he also speaks the language of the country and that of Java, where he lived a long time. When things don't get along well in the kitchen, he goes in among his servants, and you hear his voice ringing out all over the house. He is a capital landlord, and we like his table better than that of any hotel we have seen since we left San Francisco.



GENERAL VIEW OF BANGKOK.

“The hotel stands on the bank of the river, and you can step from a boat directly to the veranda of the house. The river is the Broadway of Bangkok, and all the travelling to and fro, or the greater part of it, is done on the water. In this part of Bangkok is where the foreigners live, and their houses are scattered along the banks for at least a mile. No-



HOUSE IN THE FOREIGN PART OF BANGKOK.

body wants to live where he would be without a front on the river, as it would be just like living off from the street in an American city. The merchants have their warehouses so that goods can be rolled from boats directly inside the doors; but the houses where people live are set back a little, and have a good large yard in front and all around them. They have plenty of trees in the yards, and the houses look very pretty; and

as the verandas are wide, there is an abundance of shade. Most of the houses are of two stories, and built of stuccoed brick; and a good many of the floors are of brick or stone. Wood is not very durable in this climate, as the air is moist and rots it; and, besides, they have certain kinds of insects that eat it full of holes, and make it turn to powder. Some woods decay much faster than others, and they have one kind called teak, that the insects never attack.

"As I look from the veranda where I am writing I can see half a dozen ships anchored in the river below here, and as many more up above. Most of them belong to Siam, as we can see by the flag; and there are two or three German ships, one English, and one American. The Siamese flag is red, and has a white elephant on it; we are in the country of the White Elephant, and don't intend leaving until we have seen the sacred beast. I am told that the white elephants at the king's palace have fine stables and lots of attendants, and that they are worshipped and petted till they are quite spoiled in their dispositions.

"We have hired a boat by the day, and it is to be kept for our use as long as we stay here; just as we might keep a carriage in another country. There is a little cabin where you have to stoop as you go in; and there are cushioned seats for four persons, and windows with sliding lattices all around. It takes four men to row it—two on the bow, and two on the stern—and they all row with their faces the way the boat is going. The boat is quite comfortable, and we enjoy it very much.

"The people make use of the river for all sorts of business. It is the great highway for transporting merchandise, and for promenading on the water; and it is the place where people go on shopping excursions. A great many of the houses are built on rafts of bamboo-poles, and they rise and fall with the tide. The raft is somewhat larger than the house, and forms a platform all around it; and when you want to go in at the front of a house, you have only to bring your boat along-side the raft and step off. The bamboo seems almost to have been designed by nature for the purpose of making these rafts. You know it is hollow, and very light, and that it has joints at regular intervals. Now each joint forms a water-tight compartment, and the wood will resist the water for a very long time, so that a bamboo raft has no chance of sinking. Perhaps it was the bamboo that gave the Chinese the idea of building ships in water-tight compartments, as Marco Polo says they did six hundred years ago. Who knows?

"As you go along the river you see the fronts of the houses open towards the water, and if they have anything to sell it is put where it can



be seen, exactly as it would be in a shop on Broadway. The houses are divided generally into only two rooms—the men occupying one, and the women the other; and the Siamese rarely make houses of more than one story. The reason is that they wish to avoid having anybody walking over their heads, which is considered an indignity. It is said that when the city was first built along the banks of the river there was a great deal of cholera, on account of the bad drainage, and many people died. The king then gave orders for the people to build on the river itself, which would make the drainage perfect, and thus improve the public health. The order was obeyed, and from it we find the floating houses that seem so curious to us. There are not far from fifteen thousand of these houses and shops, and they are strung along on both sides of the river for several miles, altogether. Then there are many houses built on piles, to overhang the water, just like those we described at Saigon.

“One of the books we have with us tells us that Bangkok is called ‘The Venice of the East,’ and I can easily understand why. Venice is full of canals, as you know, and so is Bangkok. They run off from the river in all directions, and you can go almost anywhere by them when the tide is up. This is why nearly everybody has a boat, as it would be difficult to go about without one. You see boats of all sizes, from a little dug-out, just large enough for one person—and a small one at that—up to the great house-boat, or barge, that will hold twenty or more. The people spend a good deal of their time on the water, and very often in it; for they swim like otters, and are not at all disturbed when one of their boats overturns with them. This afternoon, when we were out on the river, a steamboat passed us. It did us no harm, though we tossed around for a moment; but there was a small skiff close by that was filled with water by the swell from the steamer. Two boys were in it, and as the skiff went down under them, they took hold of it with their hands and swam to the shore. They soon had the water out of it, and paddled off as merrily as ever.

“Where the largest of the canals branches off there is a pretty dense collection of houses, and this continues for quite a distance. The streets are irregular, and not very wide or clean; perhaps the most of the people living in this quarter are Chinese, and they are not very particular about dirt. Most of the shops are kept by Chinese, and they have a great number of gambling-houses, for which they pay a fixed sum to the government. Gambling is a monopoly, and so is the sale of intoxicating spirits; the licenses are sold by the government, just as an American city gives a man a license to sell liquor when he pays the sum agreed on. The



Chinese that come here are just as great gamblers as they are at home, and they are just as fond of smoking opium.

"The city is said to contain half a million inhabitants, and it is little more than a hundred years old. It was founded in 1769, when the Siamese capital (Ayuthia) was captured and plundered by the Burmese. The king lives here, and the royal palace is well worth seeing. We are going there to-morrow, or perhaps next day, and we are going to see some curious temples. There are lots of temples in Bangkok, and the city contains not less than twenty thousand priests of the Buddhist religion. We will tell you more about the priests and the temples in another letter."



A SIAMESE PRIEST.

## CHAPTER IX.

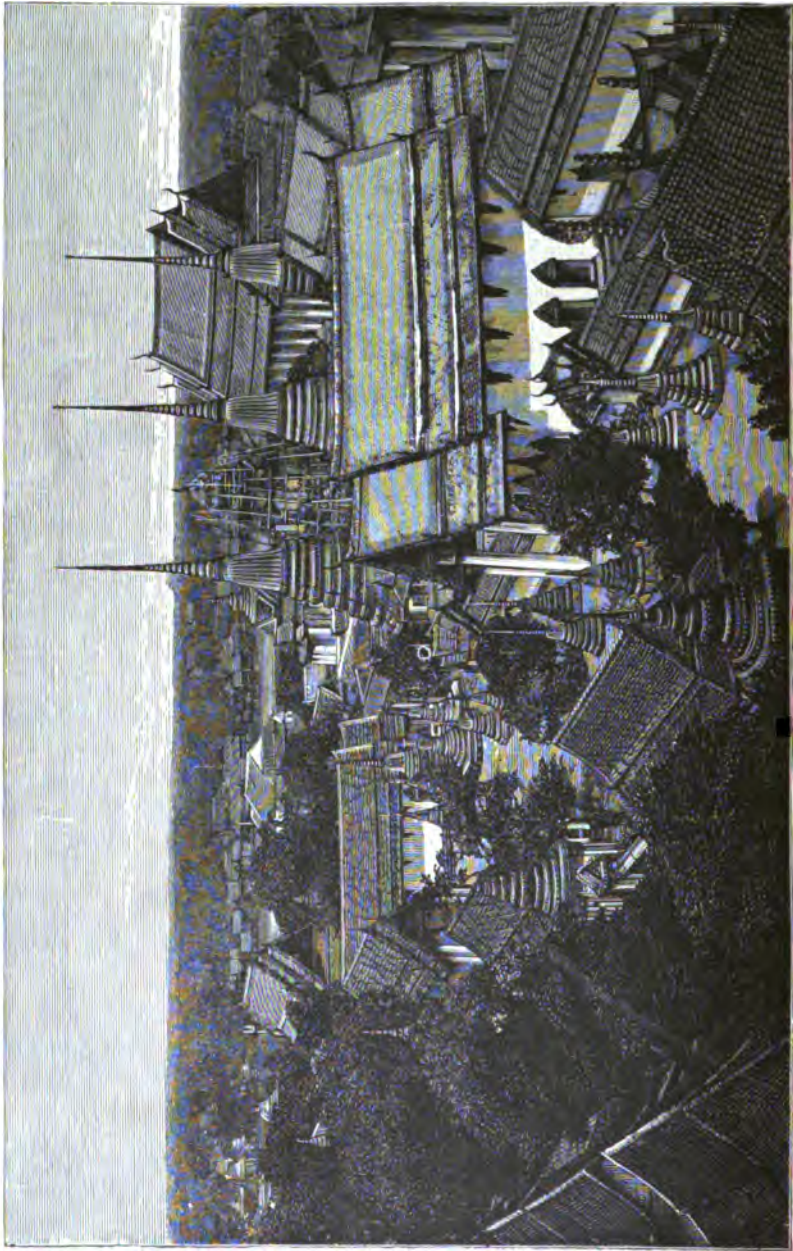
## TEMPLES AT BANGKOK.—THE FOUNDER OF BUDDHISM.

A LETTER from Fred was in the same mail with Frank's. The dutiful boy remembered his mother, and wrote as follows:

"Frank has told all about our arrival in Bangkok, and what we saw on our first day in the city. I know you will hand our letters around for both families to read, and so I will try to avoid repeating what he has said.

"One of the first things we wanted to see was the temples, for which Bangkok is famous. You must know that Siam is a country where the Buddhist religion has a very strong hold; and the king is supposed to be the defender of the ancient faith. A large part of the annual revenue of the country is expended in the repair of the temples now in existence, or the construction of new ones; and also in processions and other religious ceremonies. We are fortunate in coming here at the season of the year when the king goes to make his visits to all the temples; and, as there are many of them in the city, he has enough to do for two or three weeks. We have seen one of these processions, and expect to see more: as the one we have seen is not the grandest of them, I will keep the description of this part of our sights in Bangkok for another letter.

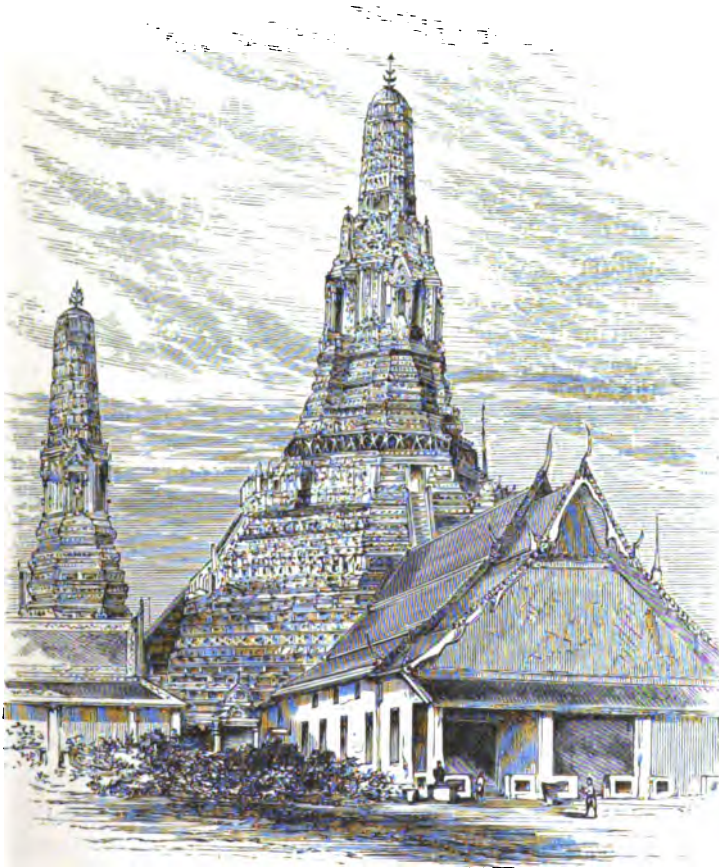
"The first temple we went to was the one known as *Wat Seh Kate*. It has the general appearance of a pyramid, and is about two hundred and fifty feet high, with a winding pathway that leads to the top. From the platform, on the summit, there is a fine view of Bangkok, or rather the form of the city can be seen, though the most of the houses are concealed by the trees. It is a curious sight, as the trees are nearly all tropical ones, and wherever you look you see palms in some form or other, with their long leaves bending in the wind, and their stems rising, often as straight as arrows, for fifty or a hundred feet. Off in the distance there are rice-fields, some of them of great extent; and close below you is a bewildering mass of temples, and palaces, and pagodas, with the river shining here and there, and forming a sharp contrast to the dark green



BIRD'S-EYE VIEW OF BANGKOK.

of the foliage. Some of the spires of the temples look as pointed as needles; and though you might think they would fall down with the first high wind, I am told they have stood for a long time, and are apparently as firm as ever.

"I enclose a picture representing a view from one of the temples, so that you can see what Bangkok is like.



TEMPLE OF WAT CHANG.

"Some foreigners have been talking of proposing to the government to convert this temple into a reservoir for water, which would be brought into the city by an aqueduct, just as water is supplied to New York and other American cities. Wouldn't that be a novel idea? The city has no aqueduct whatever, but all the water that the people use must be taken from the river or caught in cisterns during the rainy season.

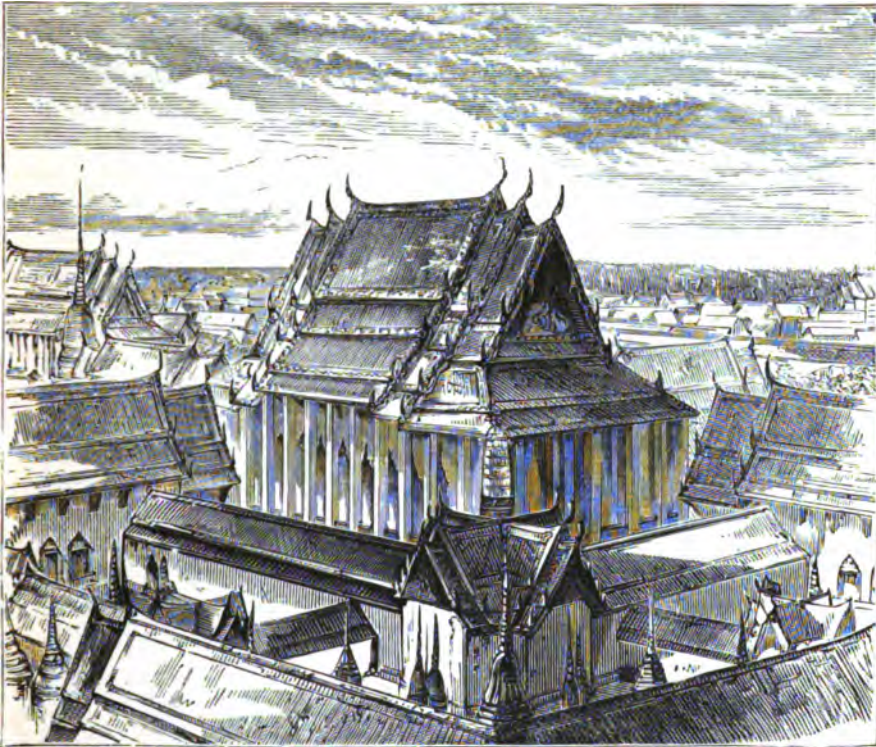


"The temple is not yet finished, and therefore the view from the top is the most interesting thing about it. On the other side of the river is another remarkable temple known as *Wat Chang*; it stands in a large enclosure, perhaps fifteen or twenty acres in extent, and this enclosure contains small gardens, the houses of the priests, and a great quantity of stone statues, some of them very grotesque in character. There are some nice fish-ponds full of fish; and in two or three places we saw grottoes of stone and brick that were very pretty. I should think that the priests had considerable taste, and were not the lazy fellows one often finds around these temples. Perhaps they did not do the work themselves, but only laid it out for others; even if that is the case, they deserve some credit for their good taste.

"The general shape of *Wat Chang* is that of a bell; and there is a spire at the top that would make a very good handle, if some one could be found large and strong enough to take it up and ring it. Doctor Bronson guessed that the building was two hundred and fifty feet high, and about the same in diameter; it is built of brick, and the outside is covered with plaster, which was stuck full, while it was moist, with all sorts of curious things. These include plates, and cups and saucers, and all manner of dishes with as many colors as the rainbow, and arranged into a mosaic that forms figures of animals, fruits, flowers, and other things, some of them hideous and unnatural. As you might suppose would be the case in the Land of the White Elephant, the largest animal that we know of is frequently represented. Sometimes he has only one head, as he has in actual life; but occasionally they give him three heads, which the Doctor says is to symbolize the Buddhistic Trinity. Besides these mosaics, there are other elephants in the form of statues, which are set in niches half-way to the summit. The sun was shining brightly when we visited this temple, and at every step the rays were flashed into our eyes till they almost ached with pain.

"We went to the 'Temple of the Sleeping Idol,' which is one of the wonders of Bangkok. It is not a great ways from the royal palace, and gets its name from the fact that there is a statue of Buddha in a horizontal position that fills the most of the interior of the building. The figure is one hundred and sixty feet long, and lies on its side; the soles of the feet are sixteen feet long, and each of them is inlaid with mother-of-pearl as delicately as though it was a finger-ring. The figures represented by this inlaid work are entirely fruits and flowers; Doctor Bronson says the fable is that fruits and flowers sprung from the earth wherever Buddha planted his footsteps. The figure of Buddha is built of

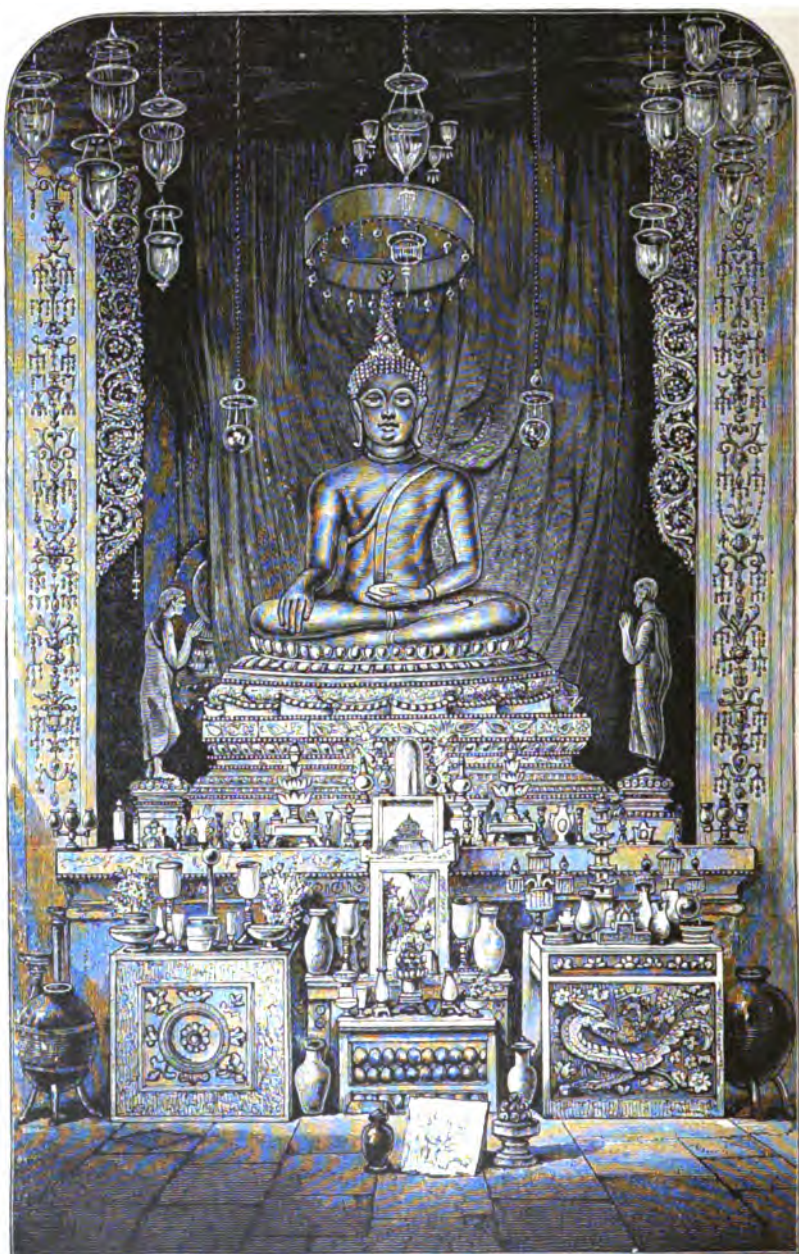




TEMPLE OF THE SLEEPING IDOL.

brick, and then heavily gilded, so that you might easily suppose it was of gold. When I tell you that the arm at the elbow is six feet in diameter, you will get an idea of the greatness of the work.

"The Sleeping Idol is not the only wonder of this temple. There are nearly a thousand other idols there, most of them of life size, and they are so thickly packed as to make you think they would be liable to get in each other's way. The temple itself is about two hundred feet long, and has a high roof with sharp peaks at the ends, and three stages rising one above another. The eaves are supported by tall columns, and thus quite a veranda is formed between them and the doors of the building; and there is a high wall around the temple, so that it would not be easy to get in without permission. The enclosure contains the houses of the priests, and some small pagodas and temples; and the priests evidently have an eye to business, as they would not open the doors till we had paid a tical for each person of our party. The tical is the Siamese coin in which everything is reckoned; it is worth about sixty cents of



BRASS IDOL IN A TEMPLE.

our money, and consequently the price of admission to the temple seemed rather dear to us.

"There is another temple that has a statue of brass nearly fifty feet high, and, like most of the statues, it is intended to represent the divine Buddha. It is in a sitting posture, with the legs crossed, and the pedestal on which it sits is of the same material, and delicately ornamented. In front of the altar there are cups and flower-vases in great variety—some of brass, others of copper, and others again of bronze thickly covered with gold. Offerings of fruit and flowers were lying on the altar, and on each side of the figure of Buddha there was the statue of a priest, standing erect, and with his hands folded in the attitude of prayer. We could not help admiring the beauty of the work, and regretting that so much money and labor had been devoted to the worship of a heathen god. The temple of the Sleeping Idol is said to have cost not less than a million of dollars, and probably ten millions would not cover the expense of the temples within half a mile of the royal palace, to say nothing of the others in the city.

"The Chinese that live in Bangkok have a great many temples of their own, but none of them are as fine as the Siamese ones. The temples that the Chinese build must be paid for out of their own contributions; while those of the Siamese are erected by the government, and the priests that take care of them have an official character. There were formerly thirty or forty thousand priests in Bangkok: they were so numerous that the father of the present king determined to compel them to work for a living, and so he took away the government support and turned them out. For a few years after he did so they were not very numerous; but they have gradually increased, until their number is now reckoned at twenty thousand. They can be recognized by their yellow robes, and they have their heads shaved as smooth as door-knobs. They live about the temples, and every morning they go around begging.

"This morning we started out early, in order to see the priests on their begging missions; and it was a curious sight, you may believe.

"Each begging priest has a boat, and generally a boy to paddle it. In front of the priest there is a basket with a cover, and as the boat is rowed up to a house the priest says not a word, but raises the cover of the basket. On the platform in front of the door there is a kettle of freshly boiled rice, and somebody, generally a woman, lifts out a quart or so of the rice with a ladle and pours it into the basket. When the operation is completed, the priest moves on; he never says 'Thank you,' and the giver never speaks. If another priest comes a moment after, he gets the same





PRIESTS PLAYING CHESS.

quantity, and the same silence is preserved. Charity is enjoined by the Buddhist religion, and what is given is given from a sense of religious duty. Captain Salje says that nobody need starve in Bangkok, as it is the privilege of every one to go to the temples and be fed. The priests receive from the people, and are expected in turn to give to those that need. But if you went to the temples you would get nothing more than boiled rice, with an occasional fish; and, as I should tire of those things in a short time, I don't think either Frank or myself will become a mendicant in the capital of Siam.

"The priests have a very lazy life of it. They lie around the temples and spend much of their time in sleep; some of them study the sacred books of their religion, and for those who are inclined to read there is a library attached to each of the principal temples. They are fond of games like chess, and several times we have found groups of them seated around tables and completely absorbed in their sport. Their chessmen are like buttons, and they hold them in little baskets, which are kept under the hands of the players. Many of them are great smokers, and when a party is at chess they usually have their pipes where they can be ready for use at a moment's notice.

"Talking about the priests naturally leads up to the religion of the country. Doctor Bronson says it is Buddhism of the purest character, and was brought to Siam from Ceylon hundreds of years ago. There is

considerable difference in the authorities about the origin of the religion, but the statement most generally received is that it began about two thousand three hundred years ago in India. Prince Gautama, who afterward became Buddha, was famous for the goodness of his disposition and his care for the happiness of his fellow-men. The religion of his time was mixed up with a great deal of cruelty, and he determined to reform it. With his title of prince, he belonged to a very rich family near Benares, which was then considered one of the most sacred cities in India; and it remains so to this day in the eyes of the native people. He became a wanderer, and for five years he travelled over the country, living on charity, and doing all the good that he could.

“At the end of five years he came back to Benares to establish a new religion, and dispute with the teachers of the old. The people were ready to listen to him, and in a short time, under his new name of Buddha, he had many converts. Among them were his father and brothers, and other members of his family; and in a few years he was able to send out apostles to all parts of India and to Ceylon, and other countries. Conversions were made very fast, and the histories say that in less than two hundred years from the time Buddha began his work five hundred millions of people in Asia had embraced the new doctrines. Temples were erected everywhere, and priests became numerous; but the new religion led to a bitter war with the old, which lasted for centuries. Buddhism was finally driven out of the most of India, and the only places where it now exists are the countries to which it was carried by the missionaries.

“An English author and journalist, Edwin Arnold, who lived some time in India, has written a poem, entitled ‘The Light of Asia,’ in which he endeavors to portray the life and character of Prince Gautama of India, the founder of Buddhism. In the preface to his interesting and highly instructive production, Mr. Arnold says:

“‘A generation ago little or nothing was known in Europe of this great faith of Asia, which had nevertheless existed during twenty-four centuries, and at this day surpasses, in the number of its followers and the area of its prevalence, any other form of creed. Four hundred and seventy millions of our race live and die in the tenets of Gautama; and the spiritual dominions of this ancient teacher extend, at the present time, from Nepal and Ceylon over the whole Eastern Peninsula to China, Japan, Thibet, Central Asia, Siberia, and even Swedish Lapland. India itself might fairly be included in this magnificent empire of belief; for, though the profession of Buddhism has for the most part passed away from the land of its birth, the mark of Gautama’s sublime teaching is stamped ineffaceably upon modern Brahminism, and the most characteristic habits and convictions of the Hindoos are clearly due to the benign influence of Buddha’s precepts. More than a third of mankind, therefore, owe their moral and religious ideas to this illustrious

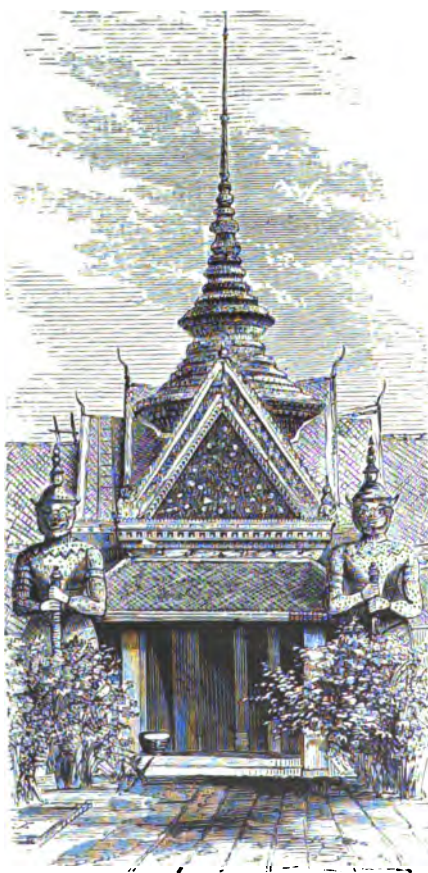


prince, whose personality, though imperfectly revealed in the existing sources of information, cannot but appear the highest, gentlest, holiest, and most beneficent, with one exception, in the history of 'Thought.'

"Another authority says that the real name of Buddha was Sakya Muni, and he was the son of the Rajah of Kapila, a small territory north of Benares. According to some of the accounts, he acquired his divine character by silent meditation; and it is one of the principles of his creed that any one can, by meditation and good works, become equal to divinity. He was said to be thirty-five years old when he attained these powers, and it required seven years of meditation to reach this condition.

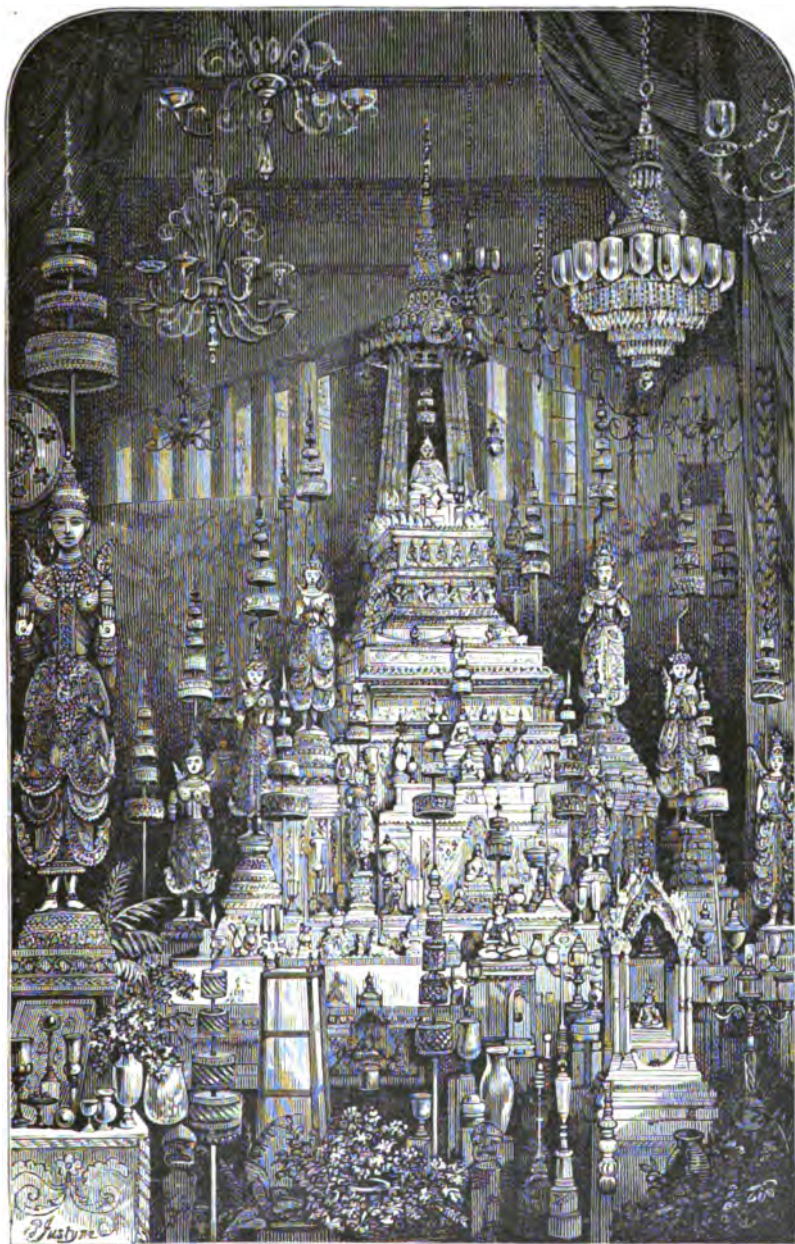
He lived to be nearly eighty years old, and was actively engaged in pushing his new doctrines until the time of his death.

"There are two reasons why I shall not write much about the religion of this wonderful man. One is that I am afraid you would not be greatly interested in what we call Paganism, and the other is that I don't feel able to describe it so that you would understand it. People who have lived here for years say it is full of mysteries, and they are not able to comprehend it. If that is the case, you could hardly expect a traveller who is only a few months in the East to tell you all about the beliefs of the natives, and their modes of worship. I am told that the creed of Buddha is a very simple one, and is founded on kindness and benevolence. It is enjoined on all believers to be charitable, and never to inflict pain on anything that lives. This part of the doctrine is not closely observed by the ordinary followers, and its strict ob-



GATE-WAY OF A TEMPLE AT BANGKOK.

servation is specially appropriate for the priests. They are not allowed to kill any animal for the sake of food, but they may eat what others



TEMPLE OF THE EMERALD IDOL.

have killed, though they are not expected to do so if vegetable food is to be obtained. They are expected to remain poor, like the monks of the Catholic Church, and whatever is given to them belongs to the temple they are attached to. The temples are sometimes very rich, but the priests have nothing they can call their own property.

"Children are instructed in the temples, and one of the duties of the priests is to give instruction when it is required. Some of the temples have schools attached to them; and there are Buddhist colleges that have acquired considerable reputation for the learning of the men attached to them.

"Attempts have been made to convert the Siamese from their present religion to Christianity, and a good many missions have been established here. The Roman Catholics came to Siam three hundred years ago, and began to preach their religion; and in the early part of this century the Protestant missions were established. The government allows the missionaries full liberty to preach and teach among the people, and makes them gifts of land when any is wanted for the erection of a church or school-house. Some of the missionaries have exercised considerable influence over the high authorities, and it is largely due to their efforts that many reforms have been adopted.

"I will close this letter by telling you something about the last of the temples we visited. It is the *Wat Phza Keau*, or the Temple of the Emerald Idol, and is so called on account of an idol of emerald a foot high and eight inches wide. It stands on an altar about fifty feet high, and all over the surface of the altar there are images representing idols, human figures, and animals, the latter including some forms that are very grotesque. The emerald idol stands in a niche which is beautifully ornamented, and the altar terminates in a long spire above the idol's head. There are paintings on the walls superior to anything we saw in the other temples, and we found that the bricks on the floor were of polished brass instead of baked clay. The hair and collar of the idol are of pure gold, and from the way the light fell upon them it looked as though they were thickly set with precious stones. Some one who has seen it more closely than we did, says that while the gold was in a melted state a handful of diamonds, sapphires, rubies, and other precious stones were stirred into it; perhaps this was so, but I should think it would be injurious to the diamonds to be thrown into melted gold, which must be of a very great heat.

"This is the temple where the king comes most frequently to say his prayers. We had hoped to see him there, but were disappointed."

## CHAPTER X.

## ASCENDING THE MENAM, FROM BANGKOK TO AYUTHIA.

DOCTOR BRONSON had a letter of introduction to the American Consul at Bangkok, which a friend in New York had given him before his departure. A few mornings after his arrival in Siam, he called at the consulate to deliver the letter and make the acquaintance of his country's representative.

He found the consul seated in a large arm-chair on the veranda of a spacious building on the east bank of the river, in the foreign portion of the city. A yard with shade-trees and gravelled walks surrounded the building, and near the landing-place there was a tall staff from which the flag of the United States waved in the breeze. The consul was a man of pleasing manners, and he was heartily glad to meet a compatriot, as the visits of Americans to Bangkok are not at all numerous. "Until you arrived," said he to the Doctor, "there had not been an American tourist here for nearly eight months. I wish more would come, as we lead rather a lonely life in Siam, and are very glad of anything to break the monotony."

In a frank, open-hearted way, the consul offered his services to Doctor Bronson and his young friends, in case there was anything he could do for them.

The Doctor thanked him for the proffered courtesy, and said they hoped to be able to see his majesty, the King of Siam, before their departure.

"I think that can be arranged without much difficulty," the consul answered. "The king likes to see strangers who are enough interested in Siam to come here out of the beaten track. He is a polite, intelligent, and most agreeable gentleman, and I feel confident that I can promise to present you to him."

"Just now he is absent from the city, and will not be back here for three or four days. On his return, I will endeavor to arrange what you wish. Meantime there is an excursion going up the river to Ayuthia,

the ancient capital of Siam, and I advise you to join it. A party is going to see some elephants driven in from the forest, and the sight will be interesting to you. It can easily be arranged for you to join the excursion, which will start to-morrow morning."

Doctor Bronson assented at once to the proposal, and, after exchanging a few general observations, he departed, promising to come again in the afternoon to learn more fully about the excursion, and to bring the boys with him to introduce to the consul. He had left them at the hotel, busy with their first letters to friends at home.

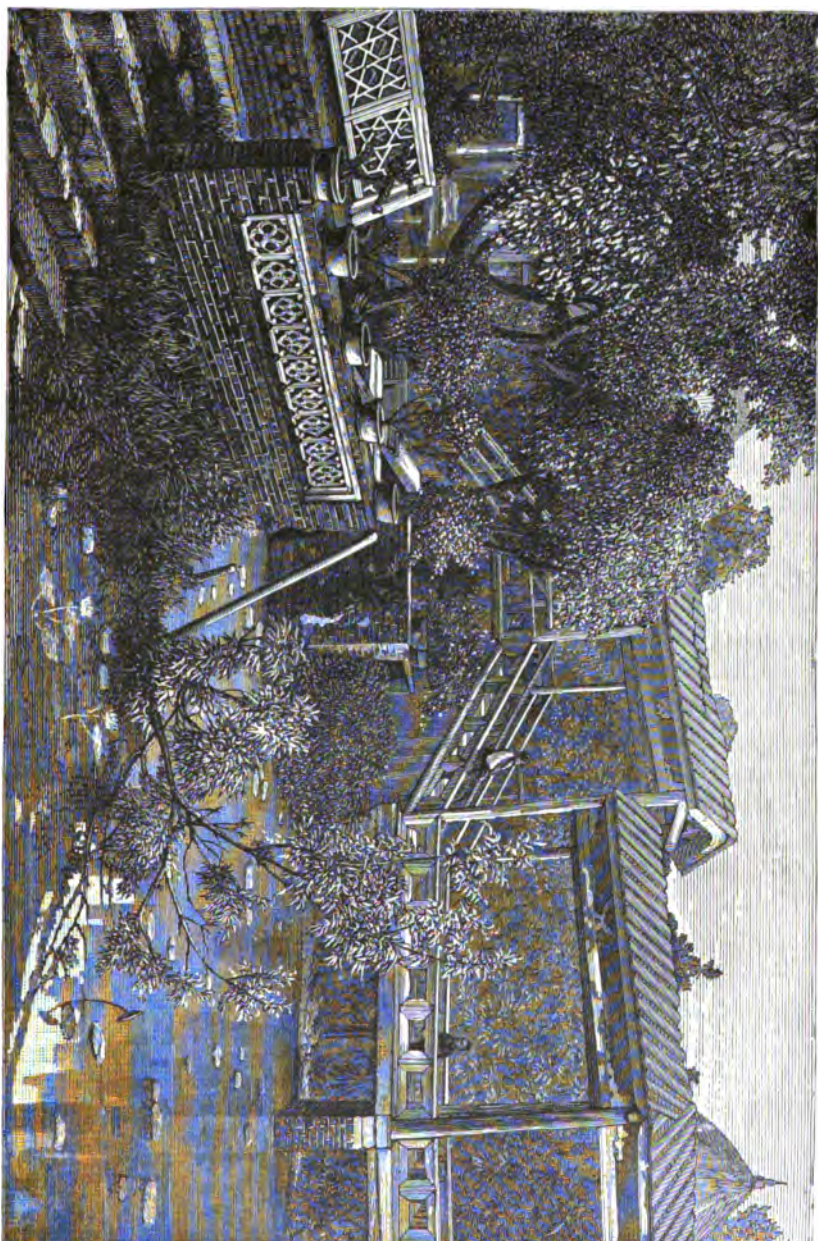
Frank and Fred were delighted at the plan for going to Ayuthia, especially as they would have an opportunity to see with their own eyes the way the Siamese catch elephants. They were impatient to be off, and could hardly keep their minds on their letters, as they were filled with thoughts of the novelties in store for them.

When they called at the consulate in the afternoon, they found that the whole business had been settled. They were to have a house-boat or barge, large enough for half a dozen persons, and it was to be towed by a steam-launch which had been procured from one of the foreign merchants at Bangkok. To economize time, it had been determined to start an hour or two before sunset, and travel during the night; by this means they would reach Ayuthia early the next forenoon, and thus have the greater part of the day for sight-seeing. The consul decided to accompany them, as the cares of the consulate were not very heavy at that particular time, and, besides, the vice-consul was there to see that nothing went wrong.

A sufficient supply of cooked and canned provisions was procured, and the necessary amount of blankets, overcoats, and other comforts was made ready. The barge came to the front of the hotel at the appointed time, and in a few moments they were steaming up the river.

Frank and Fred thought the sight was one of the strangest they had ever seen. Here was a broad river, its surface covered with small boats of a character new to them, and its banks lined with floating houses, such as have been described. Junks, and ships, and sloops, and steamers were anchored in the stream; and occasionally a great barge, rowed by twenty or thirty men, and belonging to some member of a noble family, shot past them, or turned into some of the many canals that open out from the Menam. Houses were just visible through the dense mass of palms and other tropical trees that lined the banks, and the spires of the pagodas rose above like great watch-towers, whose line of vision extended many miles. At a bend in the river the white walls of the royal palace came





PRIVATE GARDEN NEAR BANGKOK.

into view, and as they passed beyond the palace and proceeded up the river their eyes rested upon extensive fields and gardens, and on another fringe of floating houses along the bank. Suddenly a practical question occurred to Frank, and he asked the consul—

“Does the river ever freeze over?”

“Not by any means,” was the reply. “The average temperature here is about 82°. April is the hottest month, and the thermometer then goes to 97°, and sometimes above 100°. It rarely falls below 65°, and the lowest ever known is 54°. There are only two seasons—the hot, or wet; and the dry, or cool. The south-west monsoon blows from April till October, and brings heat and rain with it; while from October till April we have the north-east monsoon, which is cool and comfortable. Most of the time during the north-east monsoon we have fine weather; there is now and then a shower, but it rarely lasts long.

“There is a very good story about the absence of cold in this part of Siam. Forty or fifty years ago, when the Protestant missionaries first came here, some of them were taken before the king, who wanted to see what manner of men they were. Up to that time Siam had had very little intercourse with foreign countries, and the old king was not very well versed in the geography of other lands, and their climate and productions. So he asked the missionaries, who were from Boston, what their country was, and what it produced.

“They told him many things about America, described the Falls of Niagara, the Rocky Mountains, the Mississippi, the fields of cotton and wheat, and other things that the soil produced, the great steamboats on the rivers, and talked of many other matters that they thought would interest him. Finally, one of them told him that where they came from the rivers were frozen over two or three months in the year.

“‘What do you mean by that?’ the king asked, through his interpreter.

“‘Why, I mean,’ said the missionary, ‘that if this palace and the river Menam were at Boston, your majesty could walk across the water during three months of the year as he could walk on this floor. The water becomes solid, and men cut holes in it with axes and saws.’

“‘Now I *know* you are lying,’ the king replied, as he rose from his seat in great anger. ‘I have thought so for some minutes, and now I am certain of it.’ And he ordered the reception to end at once, as he wished no further communication with men who talked about a river getting hard enough for a king to walk on.”

The scenery along the river was much like that below the city. There



A SIAMESE FOREST SCENE.

was the same luxuriance of vegetation that had astonished the boys when they entered the Menam, the same trees, and the same creeping and climbing plants. Here and there were great fields of rice; and our friends were not surprised to learn that rice was the chief product of the country, and its only export of consequence. There were also fields of sugar, which was extensively cultivated and exported; and the consul told them that there were exports of hemp, pepper, and cotton that sometimes reached a respectable figure. There was little manufacturing industry in Siam, and what the people wanted in the way of manufactured goods was brought from Europe or America.

The consul pointed out various objects of interest as the boat moved

along the river, and explained many things that otherwise might have been misunderstood by the boys, or not comprehended at all. Frank had a commercial turn of mind, and asked many questions about the trade of Siam; and he was much pleased to find that the consul had the whole subject at his command, and was able to give all the desired information. When their dialogue ended, Frank had the following facts recorded in his note-book:

"In 1876 the exports of Siam amounted to \$8,350,000, and the imports to \$7,070,000—an increase in the volume of trade over the previous year of \$686,000. The chief export is rice, and in the year mentioned 4,101,000 piculs of rice were exported. The picul is a Chinese weight of 133 pounds. The direct exportation to the United States was 8800 piculs; but there is a large amount that is reshipped from Hong-kong, and does not appear on the records of the Siamese custom-house as going to America.

"In 1857 six foreign ships visited Bangkok; twenty years later, the number of foreign ships coming there in a single twelvemonth was more than two hundred. In 1840 there was only one trading-ship flying the Siamese flag; while in 1874 there were one hundred and twenty-nine native ships entered at the custom-house of Bangkok, and one hundred and seventy-seven cleared from the port. These ships are nearly all native built and manned, and they go to Singapore, Hong-kong, and the ports of Java. They have not yet ventured on voyages to Europe and America, and are not likely to do so for a long time to come."

Fred wished to know what American articles were used in Siam, and Frank said he was coming to that as soon as he had written down the notes about the shipping.

The consul told them it would take a long time to name over all the foreign articles that could be sold in the country; but he would certainly not advise anybody to bring a cargo of heavy woollen blankets and overcoats, as they would not be in demand.

"I should say so," answered Fred. "With the thermometer as we have seen it since we came here, a heavy blanket or anything of the kind is quite superfluous. We rather want something for keeping cool, and if somebody will invent an ice-machine that you can carry in your pocket or even in your trunk he will make a fortune."

"Yes," the consul answered, "a thing much needed in the East is a cheap, easily handled, and light ice-machine. Ice is worth from three to six cents a pound here, and sometimes it can't be had at any price. There is a machine made by a French company that is somewhat used here, but



it gets out of order easily, and has to be sent to Paris to be repaired. Where is the Yankee that will make something to go ahead of it?

"But to return to the subject of the things that are made in America and sent here to sell. We have cotton cloths of various kinds; canvas, iron, steel, and lead; glassware in several varieties; lamps, kitchen machinery and utensils; canned fruits and vegetables, together with canned fish and preserves. By-the-way," he continued, "we had a dinner at the consulate last year at Christmas-time, when everything edible on the table was of American origin, and brought to Siam in cans. The dinner-party was also made up of Americans, and you may be sure we had a good time, and could easily imagine we were at home.

"Some American machinery is used here, but not much, for the very simple reason that there is very little machinery of any kind used in Siam. All the weighing apparatus in the custom-house and other government offices is from America, as you will find on going through them."

"We passed the custom-house the other day," said Frank, "and I remember seeing some scales there which seemed like American ones. I looked for the maker's name, and saw the word which everybody knows at home, 'Fairbanks.' I was told that the king had some of these scales in his royal museum, and the only weighing-machines used in Siam, at least by the government, were made by Fairbanks."

"The native merchants are learning the advantages of the American system of weighing, in preference to their primitive one, as they can get along so much faster with the new than with the old," the consul answered. "But the East is conservative, and cannot be expected to adopt anything new very hastily.

"There is a good deal of American petroleum burnt here," he continued, "but it comes to Siam from Singapore, and not directly from America. In fact, about seventy per cent. of all the import and export trade of Siam is through Singapore, and so the merchants of Siam pay more for their goods than if they were brought here direct from the countries where they are produced. The king is desirous of having direct trade with the United States, and so are many private individuals, and it is to be hoped that some of the merchants will yet bring it about. It is a pity that the Pacific Mail Steamship Company, or the Occidental and Oriental, does not see its way clear to a branch line between Hong-kong and Bangkok, to connect with the regular steamers between Hong-kong and San Francisco. Two small steamers would perform the service, and I am confident it would pay."

There were occasional interruptions to this conversation. Now and



then the boys saw a curious tree or something else that they wished to study, and they were never tired of looking at the native boats that paddled, or sailed, or floated down the river.

One of the trees that attracted their attention as they went along near the shore belonged to the family of parasites, and was not unlike some they had seen as they ascended the river from Paknam to Bangkok. The Doctor explained that in this case the parasite was not a vine, but a distinct tree that grew from a seed deposited by the wind or by the birds on the trunk or among the leaves of a palm. It grows much faster than



PARASITE AND PALM.

the palm, and in a few years the palm dies and the parasite lives. It is held in the air by the decaying stem of the parent tree until the latter altogether rots away and falls. When once the parasite has obtained a hold, the destruction of the palm is only a question of time. Frank made

a sketch of one of these trees while the boat was stopped a few moments to enable the engineer of the steam-launch to arrange something that had got out of order.

The bamboo-tree seemed to abound along the Menam, as it does every-



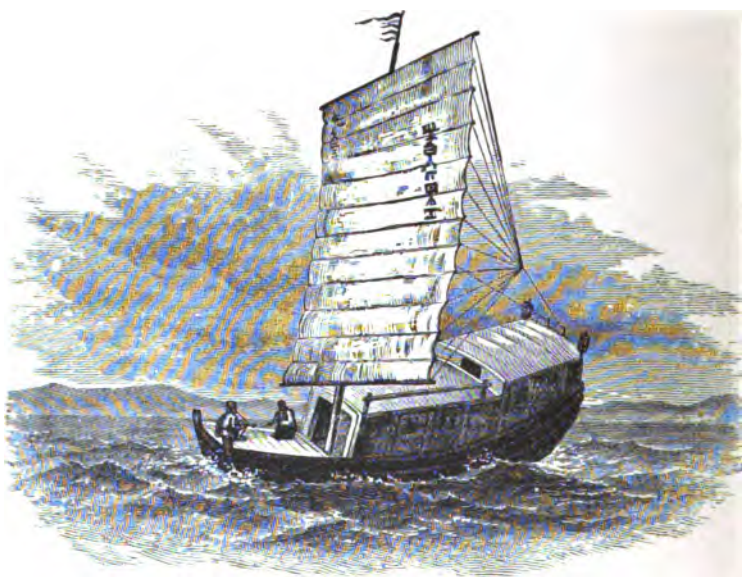
THE BAMBOO-TREE.

where in the East. In some places the stalks stood singly, and shot up straight as arrows; while in others they were in clusters so dense that the stems could not be distinguished one from another. While Frank was busy over his sketch of the parasite, Fred managed to secure a good picture of one of the most useful trees in the world. It is said that there are more than a hundred uses for the bamboo among the Chinese, and it is possible that a few others might be added in Siam and Java.

Several times they had narrow escapes from collisions with the native boats, as the men who managed the latter were not very skilful in handling the rudder. One that passed so close to them as almost to scrape her sides against the boat of our friends, was a Chinese craft not unlike what they had seen between Hong-kong and Canton. It was running

before the wind, and had a great sail of matting that was kept in place by a dozen or more cords gathered in a single line at the stern. She had a high cabin, that seemed rather top-heavy with the wind on the beam, but was all right before it; and there was a little deck forward of the mast, where a couple of men were seated. The narrowness of the escape did not appear to disturb these natives in the least, and they kept their places as though nothing had happened.

Night came upon them, but there was a good moon, and they kept steadily on their way. They were going against the current, and as the boat was considerably larger than the steam-launch, the progress was not



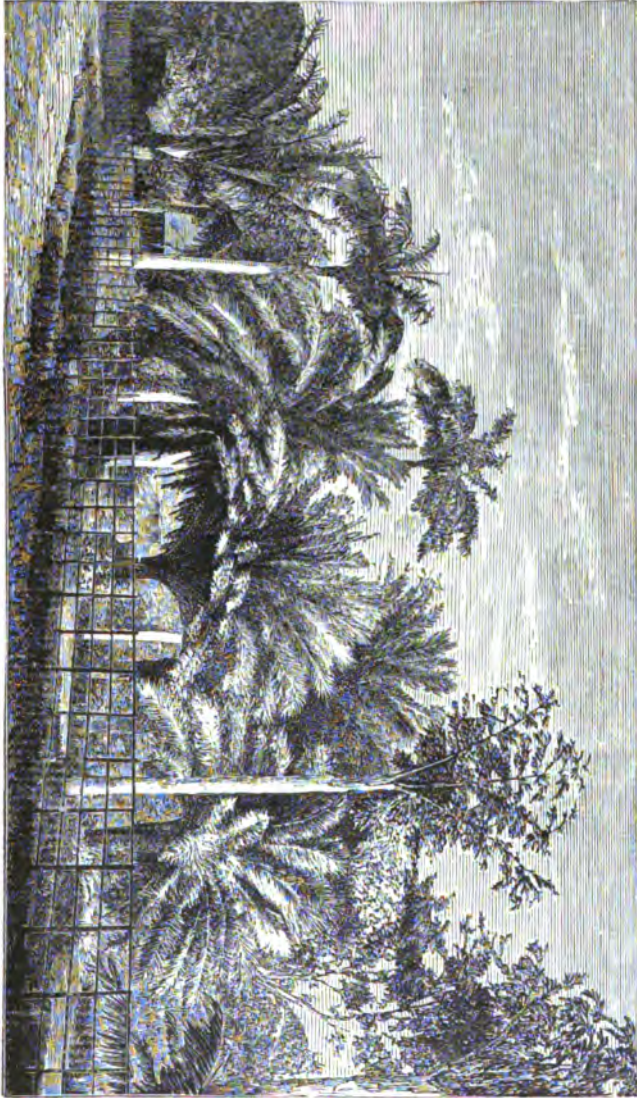
THE BOAT THEY NARROWLY MISSED.

rapid. At nine o'clock in the morning they passed Bang-pa-in, where the king has a summer palace on a very pretty island in the most picturesque part of the river. The palace is built in European style, and was completed only a few years ago; the grounds are handsomely laid out, and there is an abundance of shade-trees, in irregular groves, from one end of the island to the other.

Ayuthia is ten miles above Bang-pa-in; and soon after passing the picturesque island Frank discovered some ruins of a temple close to the river's bank. The consul told him they would soon see an abundance of ruins, and sure enough at the next turn of the river they came in



SCENE AT HANG-YA-LIN.



sight of what seemed to be a deserted village. Then they saw a number of floating houses tied to the shore, and farther on the towers and domes of Ayuthia were visible. The boat was stopped in front of a rude wharf, and the party stepped ashore in the ancient capital of Siam.



A RIVER SCENE.



## CHAPTER XI.

## VISITING THE PRINCE OF THE ELEPHANTS.—AYUTHIA.—SOMETHING ABOUT CROCODILES.

THE party went ashore as soon as the boat was made fast. Frank was first to scramble up the bank, closely followed by Fred; then came the Doctor and the consul together, and behind them the interpreter of the consulate. At the consulates generally throughout the East it is the custom to have an interpreter, to facilitate dealings with the native officials and others; he is usually a native who has been taught English in some of the mission-schools, or he may be of American or European parentage, and familiar from his youth with the language of the country where he lives. In the present instance the interpreter was an intelligent young Siamese, who was educated by the missionaries, and spoke English with great fluency. He was of much service to the Doctor and his young companions, as he could tell them many things of interest concerning Siam and what it contained.

"We will first go," said the consul, "to call on the Prince of the Elephants. He lives in that house you see up there," he continued, as he pointed to a light structure of poles and matting, a hundred yards or so from the bank.

The interpreter was sent on ahead to herald the arrival of the strangers, and returned in a few minutes with the announcement that the prince was ready to receive them.

The consul and Doctor Bronson went forward, while Frank and Fred brought up the rear. Frank thought the house was not a very sumptuous palace for a prince, especially one who had the title of the Prince of the Elephants. Fred was of the same opinion, but said they might as well reserve their judgment until they had seen what was within. Externally, the house was like a rough shed of poles for a framework, with its sides covered with matting, to allow a free circulation of air. Some of the mats were rolled up, while others were closed; and it was certainly a very convenient house for a climate as hot as that of Siam. They were

received in the upper story, to which they ascended by a rough stair-way, which could be removed as readily as a ladder. What the lower floor contained they did not know, as all the mats around it were closed.

They found the prince just inside the door-way, and seated, or rather squatted, on a bench about two feet high. Chairs had been placed for the strangers, and they were invited to be seated. The interpreter remained standing, and, after a moment's pause, the prince asked who the visitors were. The interpreter explained; and while he did so, Frank made good use of his eyes to see what the prince was like and how he lived.



THE YOUNG PRINCE.

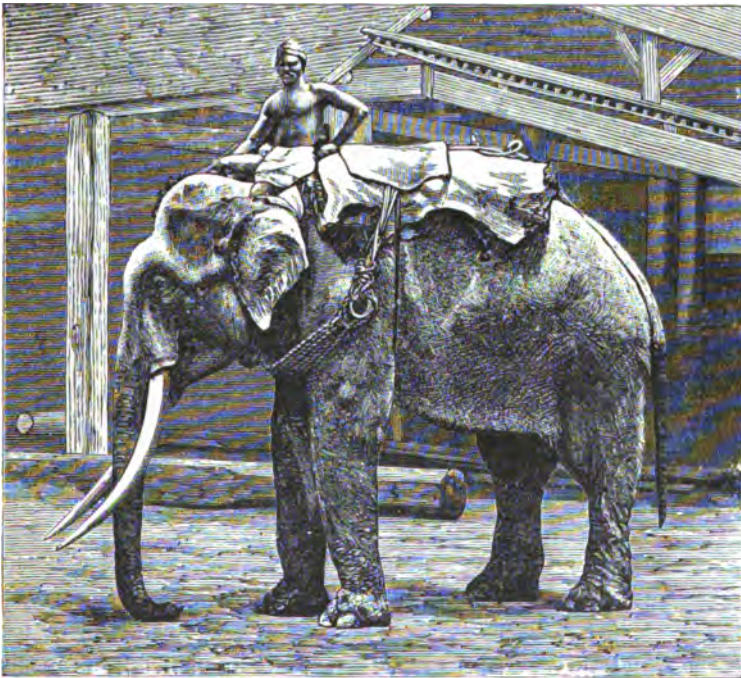
His royal highness appeared to be about fifty years old, or perhaps fifty-five. He was dressed in the native costume, without any gold-lace or other ornament to designate his high rank; the boys were somewhat disappointed at this, as they had expected to see a great personage covered with fine clothes, and ornamented with an abundance of diamonds and other precious stones. A youth, whom they supposed to be his son, stood near him, and occasionally leaned against the bench in a familiar way. Servants were creeping about the floor, and it made a strange impression on the youths to see the humble attitudes of half a dozen or more of the attendants as they waited for orders in a corner of the room. This is the position of respect in Siam, and, until the present king was crowned, it would have been as much as one's life was worth to venture into the presence of any member of the royal family in the European manner.

When he ascended the throne, he commanded that the old custom of creeping, and bowing the head to the floor in the presence of the king, should cease; it was a great innovation, but, as it was by royal command, it could not be opposed. The rule is enforced at the king's palace, but not at the palaces of the subordinate princes; and thus it happened that Frank and Fred were witnesses of what to them was a curious custom, and by no means an agreeable one.

The prince in whose presence they were was the uncle of the king.

His name was Chow Phan Alah, and the boys learned from the consul that he was a man of marked ability, who had been prominent in public affairs for a long time. Socially, he adhered to the old customs of the country, as was evident in the creeping and crouching of those around him; but in politics he was progressive, and a good deal of the advancement that Siam had made in the past twenty years was due to his energy and shrewdness.

The interview lasted about a quarter of an hour. While the party was in the reception-hall, the prince ordered cigars and fruit to be served, and when they retired he sent a basket of fruit after them as a present. The consul had suggested that Doctor Bronson and the youths would like to see the stables of the elephants, and also wished to attend the elephant-hunt that was to come off about that time. The first request was granted at once; and the prince sent one of his officers to show the stables and their occupants, and also the corral close by, where the wild elephants were caught. He regretted to say that the hunt had been postponed a few days on account of the swollen condition of some of the rivers, which made it difficult to drive the animals



PORTRAIT OF "CHANG."

through the forest. The boys were disappointed to hear this, but they were consoled with the reflection that they could see the spot where the hunt would take place, and the Doctor promised to explain to them how it was conducted.

The elephant-stable was only a huge shed, with the earth for a floor. It contained three or four elephants, all the others being out in the forest with the hunting-party. The largest of the elephants was brought out for their inspection; he was named "Chang," and was thought to be not far from seventy years old. As the elephant lives to the age of one hundred and fifty years and upwards, old Chang was just in the prime of life when the boys saw him, and his step was as elastic as that of a youth of twenty. He was not overjoyed to meet the strangers, and flourished his trunk in a menacing way; but at a sign from his keeper he ceased his demonstrations, and became thoroughly obedient.

Chang had been at work hauling timber during the cool hours of the morning, and his harness was still on his back. It consisted of a stout breastplate of ropes and leather, which was held in place by a pad on his back. Just below his shoulder a stout ring was inserted in the breastplate, and to this the ropes by which the timber was drawn were attached. The driver sat on his neck, and directed him by means of an iron goad that had a hook near the end. Frank could not at first understand the use of this iron, but he soon found out. The officer asked the boys if they would like to take a ride on the beast, and we may be sure they assented at once. Chang was directed to a place at the side of a high wall, to which a sloping path led. The boys mounted to the top of the wall, and were thus enabled to take their places on the elephant's back.



MACEDONIAN COIN,  
WITH ANCIENT GOAD.

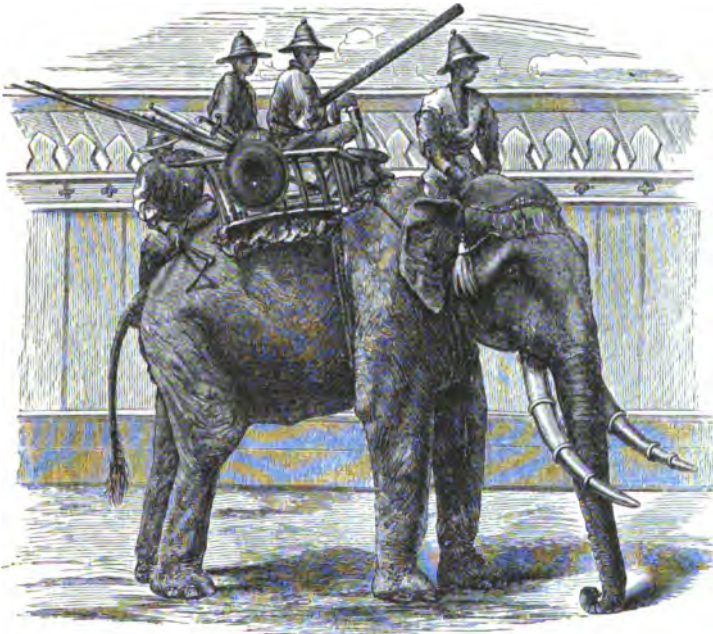
The driver said something in Siamese, and the elephant at once moved off. He did not go fast enough to suit the driver, and then the goad came into play. His neck was prodded with it, and the hook was inserted into his ear in a way that made him understand and obey. The goad has been in use without any modification of shape for two thousand years or more, as is shown by ancient coins of a date prior to the Christian era.



MODERN GOAD.

As soon as Chang found that the driver was determined to use the goad he made no further opposition, and went along as peaceably as an obedient horse. The elephant generally obeys through affection for his

driver; and instances have been known where one of these huge beasts has shown great grief at the loss of his favorite keeper, and refused all food until he literally starved to death. Very often the driver talks to the elephant, and the beast seems to understand perfectly what is said to him. Chang's driver did so, and hardly had he begun speaking before the elephant swung his trunk from side to side, and gave little grunts of



A WAR ELEPHANT.

satisfaction. The boys could not understand the language; but the interpreter told them that the driver was praising Chang for his good conduct, and asking him why he behaved so badly when the strangers came so far to see him. And with an eye to his own pocket, he said, "They are very nice gentlemen, and will certainly give some ticals to buy bananas for good old Chang." Of course the interpreter told what had been said, and the boys, when the ride was over, fulfilled the promise that had been made on their behalf.

One of Chang's companions was led out from the stable, and assigned to Doctor Bronson and the consul. The interpreter had mounted with the boys, and so the officer who came by the command of the prince took a place with the others. He told the consul that the animal they were



riding was trained for war purposes; and though he was occasionally put at work, like Chang, whenever timber was to be hauled, he ordinarily had nothing to do. Each of his tusks had three rings of silver encircling it, and he was evidently proud of his ornaments. The famous white elephants in the royal stables at Bangkok have rings of pure gold on their tusks; they are not always sensible of the honor that is shown them, and when the rings are being put in place they manifest their displeasure in the most emphatic ways. On one occasion two of the court jewellers were killed by an elephant that objected to be ornamented after the customary manner of the country, and it was only after a long time that he submitted to the operation.

When used for war, these elephants are equipped with a howdah, or basket, on their backs, and two or three soldiers are seated in it. They have a plentiful supply of weapons, and frequently so many as to encumber them greatly when they come to close quarters with the enemy. Elephants are not used in battle as much as in ancient times; the great body of the beast makes a magnificent mark for a rifle, and when wounded an elephant is more dangerous to his friends than to the enemy. Formerly a great number of elephants was kept for fighting purposes, but since the introduction of fire-arms the value of this huge beast for anything in war beyond the transportation of supplies has ceased to be apparent. Consequently, they are not at all numerous; and probably, if the Siamese were to indulge in war at the present time, they would not bring a single elephant into the battle-field.

Thus mounted, our friends went through the ruins of the ancient capital of Siam. It was a novel promenade, and one that the boys were not likely to forget in a hurry.

"The funniest thing yet," said Frank. "We went through Tokio and Kioto in jinrikishas; we rode on a wheelbarrow in Shanghai; we were carried in sedan-chairs in Canton and Hong-kong; and here we are seeing the ruins of Ayuthia from the back of an elephant. Wonder what we shall do next in the way of novel travelling!"

But though greatly enjoying their ride, they did not forget that they were out for an excursion through a city, or rather through what was once a city. And the magnitude and extent of the ruins impressed them greatly, and showed what a magnificent place Ayuthia must have been in the days of its glory.

The streets and yards, and even the houses, were overgrown with tropical trees that had been undisturbed for a hundred years and more; that they had made good use of their time, was everywhere apparent in the

crumbling walls and the fallen towers that rose before the eyes of the visitors wherever they were turned. In several instances the bushes and climbing plants had completely covered the towers of the temples, and made them appear more like a great mass of verdure than a structure of brick and mortar.

At one place the party descended from their elephants and went to the top of a wing of the former palace of Ayuthia. From the summit the view was extensive, and of a character not easy to describe. Frank thought it was not greatly unlike the view from the tower of Wat Seh Kate at Bangkok, as the abundance of trees made it difficult to see much more than the spires of the pagodas; and this was the most that could be seen in Ayuthia. But as he looked directly below him, he saw that the streets and court-yards were desolate, and he missed the throng of people that made the streets of Bangkok alive. Many parts of the palace were in a good state of preservation, and it seemed a pity that the city could not be repaired and peopled as it was of old.



NEAR THE PALACE.

It is said that when the Burmese overran Siam and captured her capital in 1769, the walls were so massive, and the buildings so excellent in construction, that the destruction of Ayuthia occupied nearly two months. Many parts of the walls are still in existence, and it is not at all difficult to trace the boundaries of the city. The distance it is necessary to travel to pass around the city by following its walls, is variously stated at from five to ten miles; and as our friends did not make the journey, they have left the question undecided.

A ruined city is a melancholy spectacle in any land and under any sky, and the boys were not at all sorry when the excursion through Ayuthia was over. They had more reasons than sentimental ones, as they found the motion of the elephant was not particularly agreeable when continued for a long time, and it required a good deal of attention to keep from falling off the back of their new-fashioned steed. When

they dismounted at the stables, they were obliged to stretch themselves two or three times to make sure that their backbones were in the proper place, and both were positive that they had all the elephant-riding they cared for—for that day at least.

"It is nothing when you get used to it," said the consul. "If you had a journey of several days or weeks to make on an elephant, you would become accustomed to the motion in a short time, and could then endure it indefinitely."

The Doctor confirmed this view of the matter, and said the motion of the elephant was not nearly as hard as that of the camel for a beginner, and much easier to endure. "A camel," said he, "shakes you violently forward and back without cessation, while the motion of the elephant is not unlike that of a horse at a walk. If you have not mounted a horse for a long time, you will find yourself very sore and stiff after your first day's travel on the gentlest steed that was ever used, and this feeling will continue for two or three days. By degrees you get accustomed to it, and then you pay no farther attention to aches or pains, for the reason that you do not have them. It is just the same with an elephant or a camel, only the camel is much the worse.



IN THE RUINED CITY.

"In some respects the elephant is a most remarkable animal. He possesses great intelligence, and can be taught to do many things that border upon reason. Books of natural history are full of incidents of the elephant's high order of intellect; the stories may sometimes be exaggerated, but there is no question that the majority of them are correct. In nothing is this more apparent than in the capture of his wild kindred; and it is a curious fact that the elephant, after being thoroughly domesticated, manifests no desire to return to his forest-life, and seems to take pleasure in assisting at the capture of others. We will talk about this business by-and-by, and meantime will complete our study of Ayuthia."

So far as the actual inspection of the ruined city was concerned, the study to which the Doctor referred was already completed, and the party returned to the boat.

Frank asked if it was not possible to go farther up the river, and make a general exploration of Siam. Fred seconded him in the question, which was anxiously propounded to the consul and Doctor Bronson.

"There are several reasons why we cannot do it," the former answered. "In the first place, we are limited for time of using the steam-launch and barge; secondly, I cannot spare the time to go farther; thirdly, we have not the necessary provisions and equipments for a wild journey; and, fourthly—"

"Never mind the other reasons," said the Doctor; "those you have given are quite sufficient. We will go back, and be thankful that we have seen so much. Only a few visitors to Siam ever have the opportunity of coming to Ayuthia and seeing its wonderful ruins."

As the boat moved off, on her return to Bangkok, the consul explained to the boys that the Menam was about nine hundred miles in length, and had a general course from north to south. It flows through an exceedingly fertile country, and the Siamese are very proud of it. Its name in Siamese means "Mother of Waters;" and though it is not to the country what the Nile is to Egypt, it is certainly of great importance. From the source of the river to its mouth, the forest is dense and luxurious, except where clearings have been made for purposes of agriculture. Teak, sapan, and other tropical trees grow to a great size, and the underbrush is so thick that it is next to impossible to walk about until a path has been opened.

Fred thought it would be nice to have a bath in the Menam; and proposed that they should try a swim in its waters the first time they had an opportunity.

"I would advise you not to try it," the consul answered. "It is safe

enough at Bangkok, where there is so much movement of boats, and you might bathe there without danger. But in this part of the river there



CROCODILES AT HOME.

are plenty of crocodiles, and the higher up you go the more of them do you find. M. Mouhot, who explored the Upper Menam in 1861, and died at the village of Louang Prebang in that year, says that in some instances he found the banks covered with crocodiles basking in the sun, and they were so unused to attacks that they were not at all disturbed by the presence of his boat. They frequently swallow incautious swimmers who venture into the parts of the river where they abound; and sometimes cattle going to the river to drink are seized by them. In such fights the



crocodile is generally the victor, as he is thoroughly at home in the water, and his jaws have an enormous amount of strength."

"What is the difference between the alligator and the crocodile?" one of the boys asked.

"There is no material difference," the Doctor answered, "between the two. The alligator is American, and the crocodile Asiatic; and there is a slight difference in the formation of the head, and in the number and arrangement of the scales. The habits of the two are similar; they live in the water for the greater part of the time, but do not suffer any inconvenience when removed from it. They live mainly on fish, but have no prejudice against swallowing other game. Hence their fondness for men, and also for pigs, sheep, dogs, cattle, and anything else that comes in their



TAKING A BITE.

way. The tastes of both are identical; and I presume that if you brought a crocodile and an alligator together, and put them to live in the same tank, they would acknowledge their relationship, and dwell in peace and quietness. On the other hand, they might indulge in a deadly combat; and in this, again, their similarity would be shown, as they are not always of an amiable disposition, and often indulge in fierce battles."

Fred asked if it was possible for them to stop on the way down the river and have a hunt for crocodiles.

Frank retorted that they had no fire-arms for shooting this kind of game or any other; and it was his opinion that their captures would not be numerous under the present circumstances.



THE DOCTOR'S CRACK SHOT.

"To shoot a crocodile," said the Doctor, "you must first have him where you can shoot, and then you must have the weapon ready. It must be a powerful rifle, carrying a large ball; and there are very few places on the reptile's body where your shot will have any effect. If you are an expert with the rifle, you may hit him in the eye when he is swimming across a stream; the bullet penetrates the brain, and causes speedy death; but if you strike him an inch away from the eye, your shot is wasted. I once killed a large alligator in this way; it was the first I had ever shot, and I was very proud of my achievement. The next day and the next I tried to repeat the performance, and I kept it up for a week without result. I was unable to get a similar chance, as not one of the reptiles made his appearance, though the bayou was full of them.

"The alligator makes great use of his tail in fighting, and in sweeping his game into his mouth. A blow of the tail from even a small alligator will break a man's leg, and I have known it to cut off a tree two inches in diameter. When the fellow wishes to capture anything, he

tries to creep along-side, and when within reach he opens his mouth and sweeps his great tail around at the same instant, and the prize disappears down his capacious throat. Once I saw an alligator lying on a bank where some cranes were feeding not far away. He was motionless as a log—which he much resembled—but I could see that he had his eye open, and was on the lookout for a breakfast. By-and-by one of the cranes wandered near him, and like a flash his tail swept the bird into his mouth. Then he stretched out and ‘set himself again,’ as my guide said, for another crane.



THE TROCHILUS.

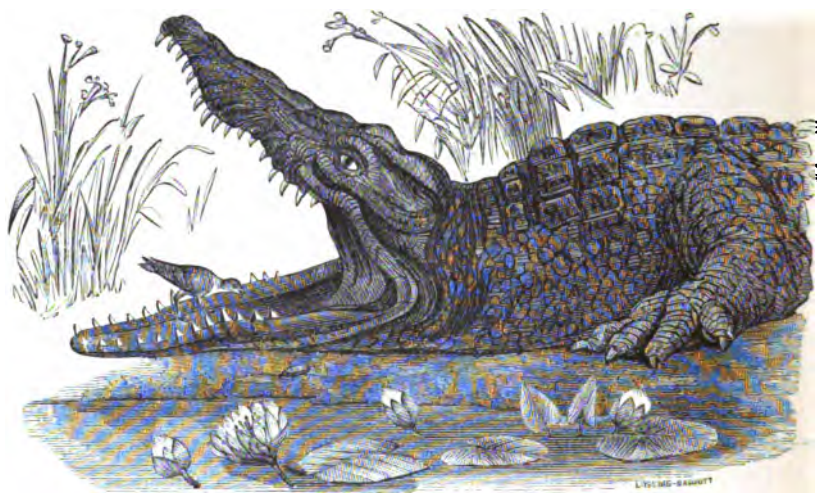
“It is a curious circumstance, mentioned by Herodotus, and greatly discussed since his time, that there is a small bird called the *trochilus* that fearlessly enters the mouth of the crocodile, and relieves it of the leeches and flies that disturb it. The bird and the crocodile seem to be on the most friendly terms; and it is thought by some writers that the bird performs the additional service of sentinel to its huge friend, and warns him of the approach of danger.”



ALLIGATOR AND CRANE.



Fred suggested that it was just possible that the bird was only an inquisitive fellow, and finding the crocodile's mouth open, he looked in to see what sort of a house it would make. And the crocodile, on his part, did not think the little bird was large enough to pay him for shutting his jaws on it; and so the intruder escaped solely on account of his diminutive size.



TROCHILUS AND CROCODILE.

"When you see a crocodile or an alligator asleep on a bank," the Doctor continued, "you can, perhaps, get a good shot by creeping near enough to send a bullet under his fore-leg. The skin there is not protected by scales, and a bullet will penetrate it. Especially if you have explosive balls that burst on the moment of concussion, you can tear a great hole inside your game, and seriously interfere with his digestion. I shot one once in this way on a sand-bar in the Nile, a few miles above the first cataract; he was nearly twenty feet long, and it took my men a whole day to remove his skin. I was within thirty paces of him when I fired, and, as I had good aim, I sent the bullet exactly where I wished. He gave a few convulsive movements with his tail, and then stretched out stiff and dead."

The Doctor paused; and the consul took up the conversation with an account a friend had given him of a fight between a bear and an alligator in Western Louisiana.

"My friend was out hunting one day," said the consul, "and was suddenly startled by a loud roaring in the bushes not far off. He cautiously

crept near, expecting to see a couple of bulls preparing for combat; what was his astonishment to see a large bear and a full-grown alligator eying each other, and poising themselves for an encounter.

"Bruin was on his hind legs, his mouth was covered with foam, and there were several streams of blood on his black coat. The alligator was on the tiptoes of all his legs, and he lashed his tail furiously, and kept his great jaws moving as if trying their ability to close on the bear at the proper moment.

"The bear growled, and the alligator roared like a bull; and it was his roaring that had attracted my friend's attention. They had evidently indulged in a clinch before he saw them, and were making ready for a second round. For fully a minute they remained in the attitudes in which he first beheld them, and neither could make up his mind how to take the best hold. Finally Bruin dropped on all fours, and ran at the alligator; the latter met him by throwing his head and body to one side, and delivering a blow with his tail that knocked the bear over on the ground, and rolled him several yards away. The blow sounded as though it had been given with a club with the force of half a dozen men, and it is safe to say that the strongest man would have been killed by it.

"The bear was not discouraged, for he picked himself up and ran once more at the alligator. He did it three times in succession, and with the same result; the alligator knocking him over each time.

"Bruin now saw that he must change his tactics. He made his next run in such a way as to avoid the tail, and he was fairly on the alligator's body before the blow could be given. The great tail was lashed furiously from side to side, but to no purpose, as it could not hit the bear either way. The force of the charge upset the alligator, and turned him completely over; the bear's jaws closed on one of his fore-legs, while the shaggy paws were clasped around the scaly body. The reptile was in a bad way, as his great weapon of warfare, the tail, was useless; and his neck was not flexible enough to enable him to bite. He roared in despair, and then bethought himself of a new trick.

"His tail, as he lashed it around, happened to hit a small tree; he pushed against this tree as with a lever, and by using it as a fulcrum he managed to wriggle along to the bank. Then another convulsive movement threw him and his antagonist into the water.

"The bank from which they fell was about four feet high, and they tumbled in with a loud splash. They disappeared below the surface, and were out of sight for nearly two minutes. The bear came up, and, after scrambling to the shore, he gave a brief glance at the stream, to



make sure that there was no chance of renewing the combat; then, shaking the water from his skin, he hurried off into the forest. My friend could have shot the bear with the utmost ease, but in consideration for the courage and determination he had shown he did not do so."



THE ALLIGATOR AND THE BEAR.

"He was right," said Frank; "such bravery should command respect."

"But how about the alligator's part of the fight?" the Doctor asked.

"As to that," responded the youth, "the alligator deserves no credit. When he found he could not conquer the bear on equal terms, he sneaked into the river. He could live in the air or in the water, while the bear could not fight below the surface of the stream, and could not even live there. All the alligator had to do was to sink in the water, and the bear must drown or let go his hold. I like the bear's bravery, but don't think much of the other fellow."

"No more do I," Fred chimed in; "and it is a pity that the alligator could not have been shot before he rolled from the bank. All the race of crocodiles is a cruel one, and ought to be exterminated."

"They are fast being driven from existence," said the Doctor. "Twenty-five years ago they were numerous in the Nile below Luxor; while to-day they are rarely seen below the first cataract, which is more than a hundred miles above Luxor. They are also becoming scarce in the rivers of India; and the alligators in the southern parts of the United States are not nearly as numerous as they were. Still, there are enough for all the demand that is likely to be made for them, and anybody who will invent a way of killing them rapidly will confer a benefit upon the human race."

"In regions where these reptiles abound, the natives have adopted the sensible plan of destroying the eggs whenever they find a nest. The nests are made in the sand or on a bank of earth, and the female alligator usually lays from twenty to forty—rarely more than the latter number. They are hatched by the heat of the sun: the mother does not sit on the nest like a hen, but she stays in the neighborhood and fights for their protection. When the chicks emerge from the shell they hurry off to the water, or to a hiding-place in the mud; and they seem to understand that they will be subject to many dangers until they get large enough to defend themselves. Cranes and fish are fond of them in their tender youth, and even the fathers of the alligator family seem to mistake them for frogs, and eat them with apparent delight.



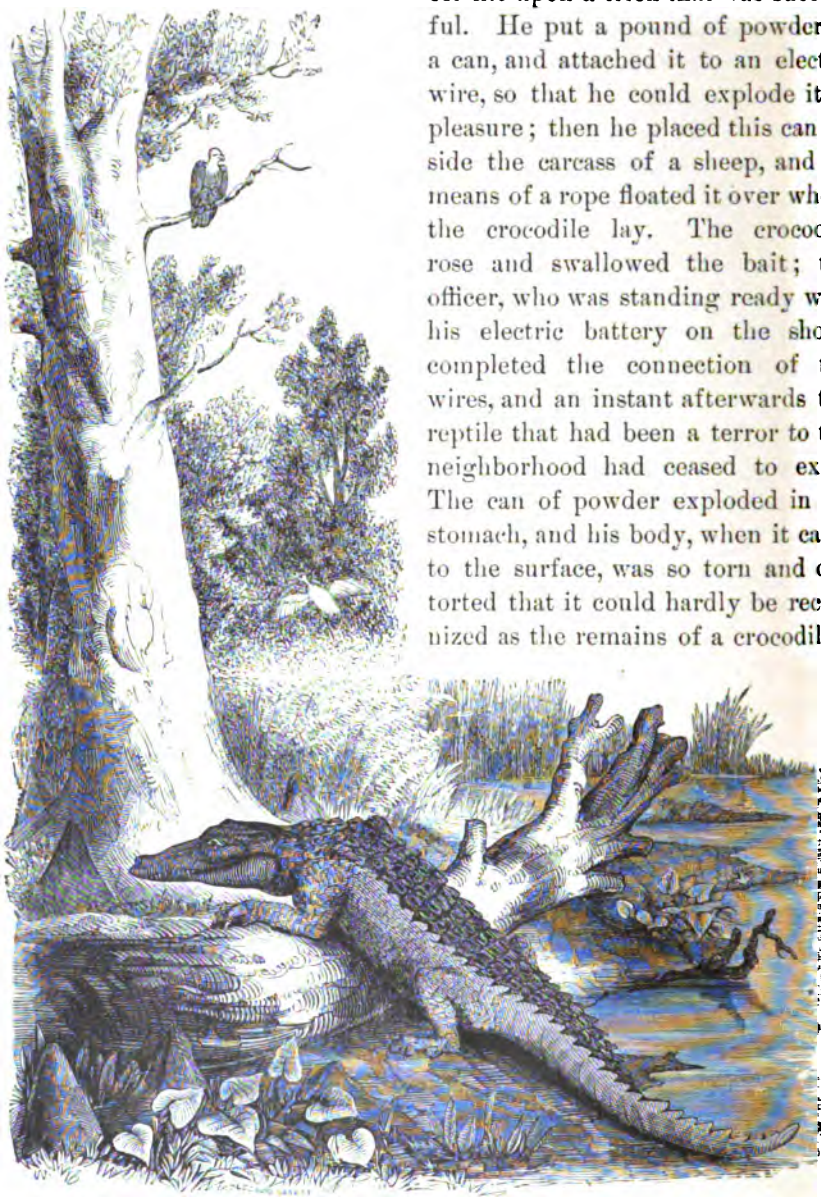
JUST HATCHED.

"In some parts of India the natives dig a circular pit, and cover it with sticks and leaves. The pit surrounds a little island or mound of earth, and is close to a stream where crocodiles abound. On the mound they fasten a young goat, and his bleatings during the night attract the crocodiles, who break the slight floor of sticks with their heavy bodies, and fall into the pit prepared for them. Heavy stakes are set in the bottom of the pit, and as the reptile falls he is generally impaled on one or more of them.

"I have read of a famous old crocodile who defied all the ordinary

modes of capture, in one of the rivers of India. Finally an English offi-

cer hit upon a trick that was successful. He put a pound of powder in a can, and attached it to an electric wire, so that he could explode it at pleasure; then he placed this can inside the carcass of a sheep, and by means of a rope floated it over where the crocodile lay. The crocodile rose and swallowed the bait; the officer, who was standing ready with his electric battery on the shore, completed the connection of the wires, and an instant afterwards the reptile that had been a terror to the neighborhood had ceased to exist. The can of powder exploded in his stomach, and his body, when it came to the surface, was so torn and distorted that it could hardly be recognized as the remains of a crocodile."



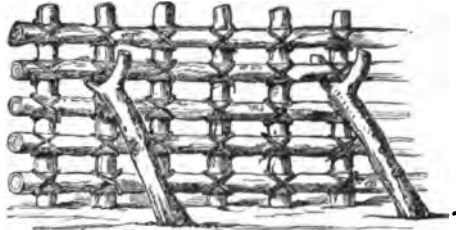
COMING OUT TO SUN HIMSELF.

## CHAPTER XII.

## STORIES OF ELEPHANT-HUNTING.—SCENES OF THE CHASE.

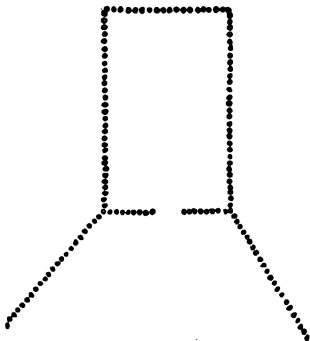
WHEN the topic of crocodiles and their relatives had been exhausted, Fred reminded the Doctor of his promise to tell them something of the ways of hunting elephants.

"I was just coming to that," said Doctor Bronson, "and have been trying to refresh my memory on the subject. I do not know how they hunt elephants in Siam, but from the appearance of the corral near the elephants' stables, I infer that the process is pretty nearly the same in all countries where the elephant is found in a wild state.



AN ELEPHANT FENCE.

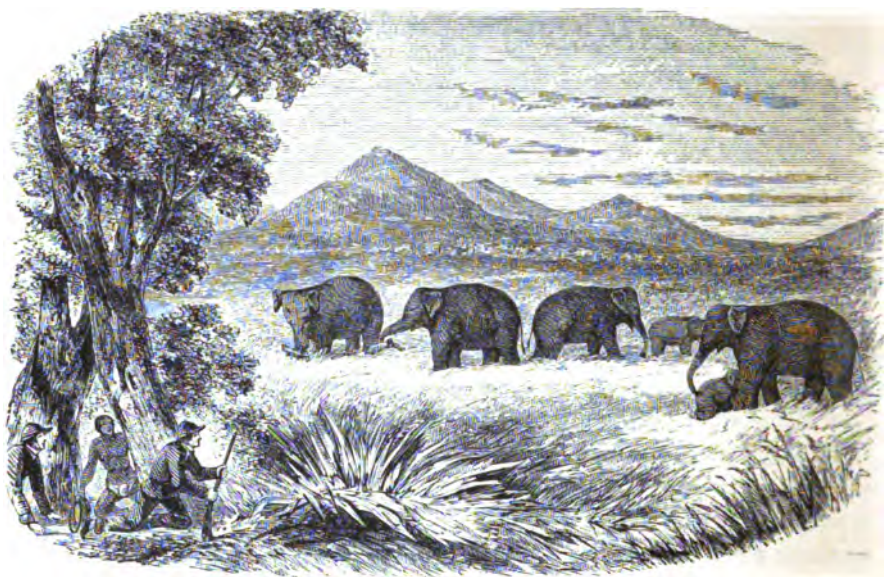
"You observed that the corral, or yard, at Ayuthia was constructed of upright logs set into the earth in the form of a palisade. In Ceylon it is made of heavy posts, with strong timbers placed horizontally, the whole interlaced and bound with withes, and braced with slanting posts on the outside. The fence is generally about fifteen feet high, and the openings in it will easily allow a man to pass through. At Ayuthia you saw that the posts of the corral permit the same thing; the fence is like a sieve, that strains men through without difficulty, but catches the elephants.



FORM OF A CORRAL.

"Here is the general appearance of the fence," said the Doctor, as he took his pencil and drew on a sheet of paper, "and here is the shape of the corral. The corral is a pen, and the word is derived from the Spanish, and means a ring or enclosure. The space en-





BEGINNING THE DRIVE.

closed is generally about five hundred feet long by half that width, and at one end there is a gate that can be opened and shut very quickly, and is large enough to permit the passage of but one elephant at a time. There is an avenue, shaped like the letter V, which leads up to the corral, and converges on the side where the gate is placed. It is concealed as much as possible by brushwood, and where it begins it is so slight as to be hardly perceptible. It extends a long distance into the forest, and a great deal of skill is required to construct it successfully.

“When the corral has been arranged, and is ready for occupation, the herd is supposed to be in its vicinity. Eight or ten weeks have been spent in driving in the elephants; the forest where they roam has been surrounded very cautiously, and several herds have been driven together so slowly and quietly, that none of the sagacious beasts has any suspicion that he is being entrapped. Sometimes hundreds of men are employed in driving in the herds, and an area is surrounded equal to several counties of an American state. Day by day the circle grows narrower, and finally the men composing it are able to build fires ten or twelve feet from each other. Not till then do they consider the game fairly bagged, and now they throw off all deception and adopt new tactics. Where before all was still, is now a scene of wild confusion; the men make a loud noise, with musical and unmusical instruments, and each of them



carries a torch, which he waves wildly in the air. They do this on three sides of the herd, while the fourth side, in the direction of the corral, is left conveniently open.

"The elephants are frightened, and rush in the desired direction; they now begin to suspect a snare, and frequently try to break through the line of men and rush back to their forest home. The men pelt them with the torches, and strike them with the burning sticks, till they turn around again and go where they are wanted; gradually they near the end of the corral, and finally a few of them make their way through the gate and are securely trapped. The natives rush forward and close the bars of the gate, and the rest of the herd is permitted to stray a little way back into the woods, but it is carefully kept from going too far.

"When they find they are caught, the elephants rush wildly round the corral, trying first one part of the fence and then another, in the hope of escaping. Wherever they go, they are met at the fence by men with flaming torches; and they are further terrified by discharges of musketry, and the sound of horns and trumpets. This performance is kept up for several hours of the day, and generally through the night; and at day-break they make ready to secure the captives, and prepare the corral for a second lot of elephants.

"It is in this work that the elephant shows the peculiarity of his nature, in using all his sagacity to assist in the capture of his kindred. He seems to know what is wanted of him, and invariably appears to take great delight in doing it."



DRIVING INTO THE CORRAL.

"Elephant nature is not altogether unlike human nature," remarked the consul, with a smile. "Not a few of our fellow-men, whenever they fall upon misfortune, are desirous of having others to share it with them."

"It is an old adage that misery loves company," said Fred.

"But I hope it is not a true one," Frank responded. "Perhaps we had better give the human race the benefit of any doubt on the subject, and say that the quality we have been talking about is elephant nature, and does not belong to us."

His proposal was accepted, and the account of elephant-hunting was resumed.

"The removal of the captives requires a good deal of skill and caution, both on the part of the tame elephants and on that of the attendants. Here is an excellent account of this operation :

"The bars which secured the entrance to the corral were cautiously withdrawn, and two trained elephants passed stealthily in, each ridden by his *mahout*—or *ponnekella*, as he is called in Ceylon—and one attendant, and carrying a strong collar, formed by coils of rope made from cocoa-nut fibre, from which hung on each side cords of elk's hide, prepared with a ready noose. Along with them, and concealed behind them, the head-men of the *cooroowe*, or noosers, crept in, eager to secure the honor of taking the first elephant—a distinction which this class jealously contests with the mahouts of the chiefs and the temples. He was a wiry little man, nearly seventy years old, who had served in the same capacity under the Kandyan king, and wore two silver bangles, which had been conferred on him in testimony of his prowess. He was accompanied by his son, named Ranghanie, equally renowned for his courage and dexterity.

"On this occasion ten tame elephants were in attendance; one of which had been caught only the year before, but was now ready to assist in capturing others. One was of prodigious age, having been in the service of the Dutch and English governments in succession, for upwards of a century. The other, called by her keeper 'Siribeddi,' was about fifty years old, and distinguished for her gentleness and docility. She was a most accomplished decoy, and evinced the utinost relish for the sport. Having entered the corral noiselessly, she moved slowly along with a sly composure and an assumed air of easy indifference; sauntering leisurely in the direction of the captives, and halting now and then to pluck a bunch of grass or a few leaves, as she passed. As she approached the herd, they put themselves in motion to meet her, and the leader, having advanced in front and passed his trunk gently over her head, turned and paced slowly back to his dejected companions. Siribeddi followed with



SECURING THE CAPTIVES.



the same listless step, and drew herself up close behind him, thus affording the nooser an opportunity to stoop under her and slip the noose over the hind foot of the wild one. The elephant instantly perceived his danger, shook off the rope, and turned to attack the man. The latter would have suffered for his temerity, had not Siribeddi protected him by raising her trunk and driving the assailant into the middle of the herd, when the old man, being slightly wounded, was helped out of the corral, and his son, Ranghanie, took his place.

"The herd again collected in a circle, with their heads towards the centre. The largest male was singled out, and two tame ones pushed boldly in, one on each side of him, till the three stood nearly abreast.



SIRIBEDDI'S PRIZE.

He made no resistance, but betrayed his uneasiness by shifting restlessly from foot to foot. Ranghanie now crept up; holding the rope open with both hands, its other extremity being made fast to Siribeddi's collar, and watching the instant when the wild elephant lifted its hind foot, he succeeded in passing the noose over its leg, drew it close, and fled to the rear. The two tame elephants now fell back; Siribeddi stretched the rope to its full length, and while she dragged out the captive, her companion placed himself between her and the herd to prevent any interference.

"In order to secure him to a tree, he had to be dragged back some

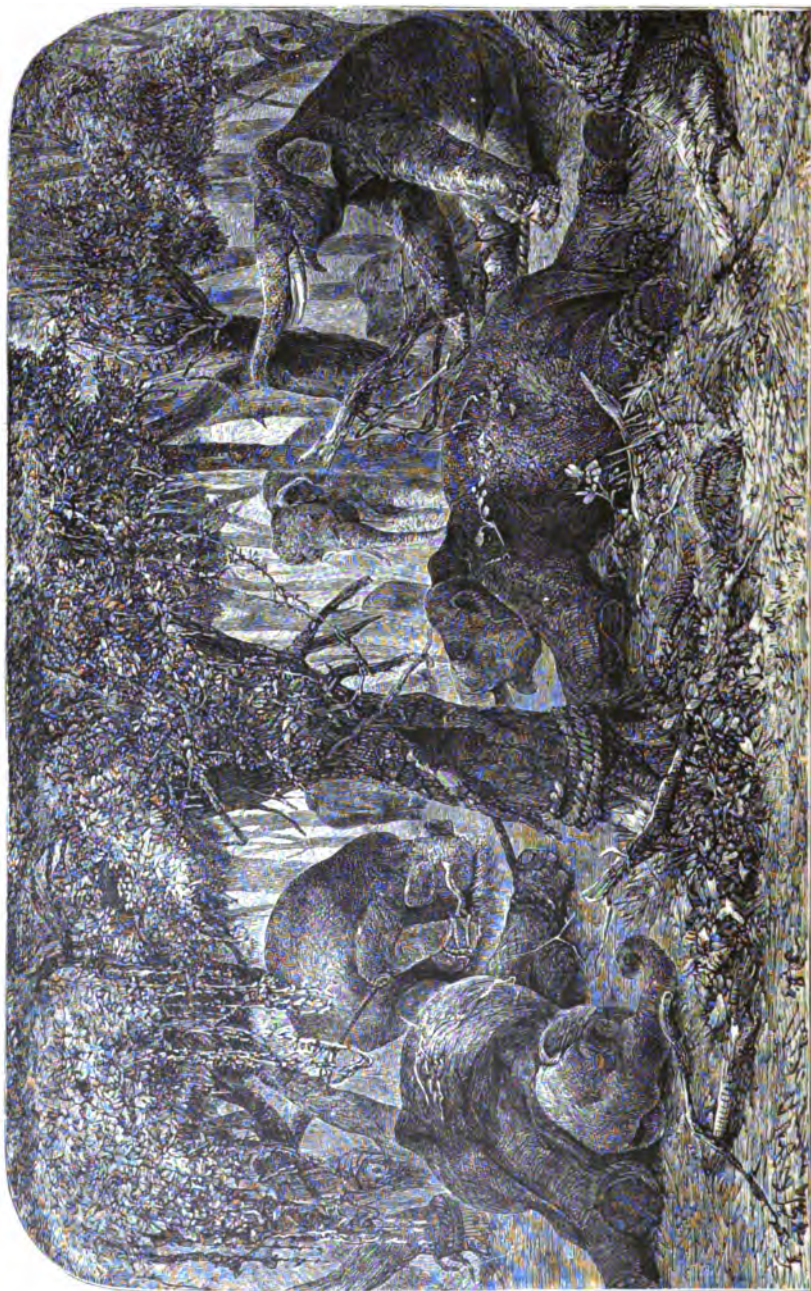
twenty or thirty yards, making furious resistance, bellowing in terror, plunging on all sides, and crushing the smaller timber, which bent like reeds beneath his clumsy struggles. Siribeddi drew him steadily after her, and wound the rope round the proper tree, holding it all the time at its fullest tension, and stepping cautiously across it when, in order to give it a second turn, it was necessary to pass between the tree and the elephant.

"One after the other the herd was secured, in spite of their resistance; and the whole time consumed in disposing of an elephant, from the moment the decoys approached him till he was secured to a tree, was about three-quarters of an hour. The captives tried all possible ways to escape, but it was of no use; they were fastened to the trees, and the cords were so strong and so well tied that the greatest exertions of the prisoners were of no effect whatever. Some of the tricks they practised in endeavoring to escape were very ingenious, and showed that the elephant in his wild state has the full development of the sagacity which he displays in captivity. Their strength is enormous, and sometimes they pull down trees in their struggles.

"It is a curious circumstance," the Doctor continued, "that the tame elephant who is assisting at the capture of his kindred never displays the least sympathy for them; while they, on the other hand, show a great deal of it for each other. When a captive, who is being dragged to a tree, passes one that is already tied up, he will stop and twine his trunk around the other's legs and neck, and manifest in all the ways that he can a deep sorrow for what has happened.

"When the animals are secured the corral presents a curious spectacle. The great beasts are stretched out in various attitudes, their feet fastened to the trees, and sometimes spread far apart. They moan and bellow for hours together; they seize hold of the trees with their trunks, and exhaust all their ingenuity in endeavoring to get free. When all other means have failed, they will often try to escape by turning somersaults; and it is interesting to see an elephant balancing himself on his head, and endeavoring to throw his heels in the air. For awhile they refuse to eat or drink, and sometimes they literally starve themselves to death. I have heard of several instances where they have refused to move or eat, and remain motionless for days, till they die. It is generally the finest elephant of a herd that kills himself in this way; the natives say he dies of a broken heart, and I am quite inclined to believe that such is the case. And it sometimes happens that after an elephant has been tamed, and is thoroughly obedient to his keeper, he will lie down and die on the very first attempt to harness him.





THE PRISONERS TIED UP

"There is a story of an elephant in Ceylon, which was one of the finest that had been taken in a long while. He resisted a good deal when first captured; and when they were removing him from the corral to the stables, a distance of about six miles, he was so obstinate that the journey occupied several hours. He escaped once, but was afterwards recaptured and became very docile; but when he was taken to Colombo, he stopped in front of the gate of the fort, and would not enter. While they were trying to persuade him to go inside, he lay down on the ground and died, without the least struggle."

Frank asked in what way the elephants are tamed, after they have been captured and tied up as the Doctor described.

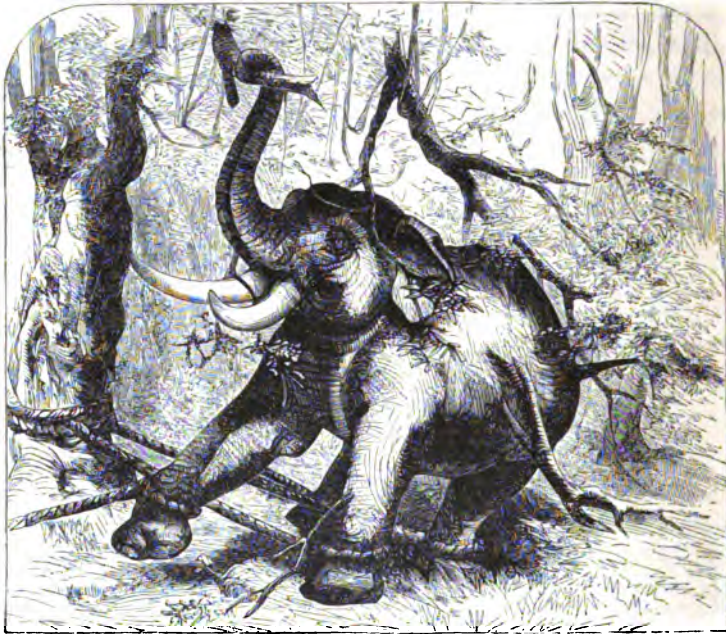


A LITTLE HEAD WORK.

"They are subdued," said the Doctor, "partly by starvation, and partly by kind treatment. Hunger is the great force used, as the elephant is not allowed to have any food until he shows signs of becoming tractable. Sometimes he is starved for a week or more; but he is allowed to satisfy his thirst to a limited extent. When he indicates that he has become docile, and is accustomed to the presence of his keeper, he is released and taken to the stables, where he is well fed. No attempt is made to harness him for some time, but he is exercised with the other elephants, and gradually reconciles himself to a captive state. In nine cases out of ten he never shows the least inclination to rebel, but accepts his new condition of life with perfect resignation; and, as I have before told you, he is quite ready and willing to assist in the capture of his former comrades.



"In some parts of Asia the natives capture elephants by digging deep pits, and covering them with bushes and leaves, so that the trap is quite



IN A HEAP OF TROUBLE.

concealed. The herd is then driven in the direction of the pit, and some of the animals fall into it. A guard is placed over them, and they are kept without food for seven or eight days, and even for a longer period if they do not submit. When they are conquered, the sides of the pit are dug down, and they are led out of the place of their imprisonment. There is a very good story connected with this mode of capture; it is an old one, and evidently the Eastern version of the fable of the mouse and the lion, which is in all the story-books."

"Tell it, please," said Fred; and the request was echoed by his cousin.

"I will tell it," said the Doctor, "though I fear you may consider it too juvenile for you.

"Hundreds of years ago an elephant was taken in a pit in a forest in India. He bemoaned his fate, and wept aloud. The guard that had been left over him was asleep under a tree, and a priest who was passing heard his lamentations and tried to console him.

"'Alas!' said the elephant, 'there can be no consolation for me. I

must stay in this pit till I am subdued, and then I shall be the slave of man. No one can save me.'

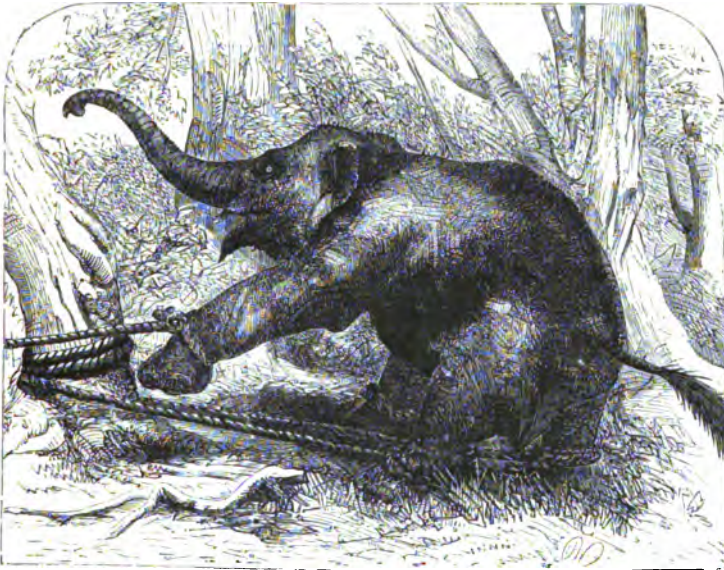
"Don't be so sure of that,' replied the priest. 'If you have ever done a good action to anybody, you can call him to your aid, and he will assist you. Think of some service you have given, and perhaps it will now be of use to you.'

"I have done services on several occasions,' the elephant answered; 'but those who were favored were so small that they can now do nothing for a great body like me.'

"Tell me one of them,' said the priest.

"Last year,' said the elephant, 'the prince of this province had captured the king of the rats, and a great many of his subjects. He had them in earthen jars, and was about to drown them; but I came along in the night and broke all the jars, so that the rats ran away and were free.

"And another time a man had the queen of the tribe of the parrots in a cage, and hung it on a tree where nobody could reach it. I pulled



REFUSING TO MOVE ON.

the tree down and broke the cage, so that the queen flew away to her companions.'

"Just then the scream of a parrot was heard from a neighboring tree, and the priest said to the elephant,

“‘Call that parrot, and ask him to go and tell his queen to come and see her benefactor, who is now in trouble.’

“The elephant protested that it would be of no use, as the parrot could not help him in any way, no matter how willing she was to do so. But the priest insisted, and the elephant obeyed.

“In a little while the queen came, and then the priest told the elephant to send her with a message to the king of the rats. Away she flew, and told the rat king how their old benefactor had fallen into a pit.

“The king sent out his messengers to all parts of his dominions, and by the next morning they were assembled to the number of several millions. The king ordered them to follow him, and they went to where the elephant was entrapped. The parrot queen was there ahead of them, and she had brought millions of her subjects. The guards were now awake, but the parrot queen talked to them and amused them, and she kept flying off a little way at a time, till she drew them out of sight of the pit. Then the rats began scratching at the edge of the pit; and though each of them only threw down a very little earth at a time, there was soon a large path sloping to where the elephant stood. At the same time the millions of parrots began breaking little twigs from the trees, and dropping them into the pit; the elephant piled these twigs and the earth beneath him, and in a few hours he walked out of the pit, and away into the forest, where he joined his companions and told them what had happened.

“‘Who would have thought,’ he said to his fellow-elephants, ‘that the largest animal in the world could be saved by such insignificant creatures as the parrot and the rat. Hereafter I will never despise small things, or despair of being brought out of trouble. Good actions will be rewarded, no matter how insignificant may be their recipient.’”

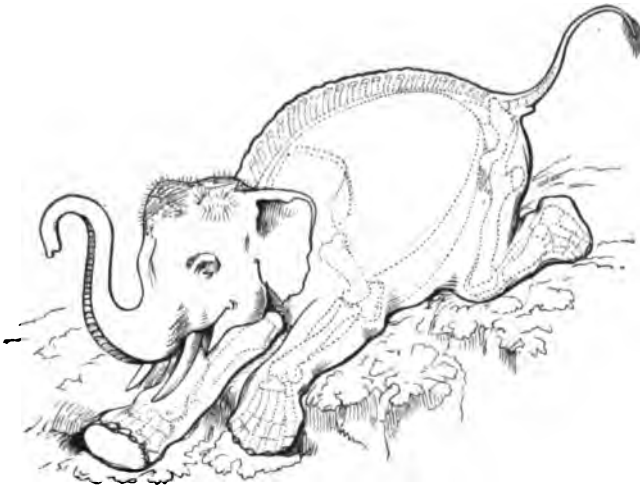
“A very pretty story!” exclaimed both the boys in a breath.

“It is a story with a moral,” Doctor Bronson answered; “and I leave you to apply it while we have a little more talk about the elephant.”

“A baby elephant is about the most amusing beast in the world; he is affectionate and playful to a high degree, and there is little difficulty in taming him. Very often the young elephants are taken in the corrals with their mothers, whom they follow to the tying-down place, and thence to the stables when the captives are released from their bonds. A gentleman at Colombo had one that was sent down to his house from the corral where he was taken, and he very soon became a favorite with everybody about the place. He stayed generally near the kitchen, where he picked up a good many things of which he was fond; and sometimes,



when the gentleman was walking in the grounds, the young giant would come to him and twine his trunk around his arm, to indicate that he wanted to be taken to the fruit-trees. He used to be admitted to the dining-room, and helped to fruit at dessert, and he finally got to coming in at odd times when not invited. On two or three occasions he managed to break all the glasses on a sideboard, while reaching for some oranges in a basket, and finally he became so mischievous that he had to be sent away. While he was at the house the grass-cutters occasionally placed their loads of grass on his back, and whenever this was done he strutted off with an air of the greatest pride at the confidence that was shown in



SLIDING DOWN HILL.

him. After he was sent to the government stables he became very docile; and when his turn came for work, he performed it to the satisfaction of everybody.

"It is said that elephants amuse themselves by sliding downhill; but they do not use sleds, like boys in America. Natives who claim to have witnessed these performances say that the huge beasts enter into the sport with great enthusiasm, and keep it up for hours.

"Elephants are hunted with the rifle by English and other sportsmen; and thousands of them have been killed in this way for the sake of their tusks, or for mere amusement. Their number has been so much diminished by this means, that in India and Ceylon the government has taken the elephant under its protection, and it can only be pursued and slaughtered by the express permission of the officials. At present the paradise



ELEPHANT-HUNTING ON FOOT.

of elephant-hunters is in Africa. The African elephant is much like his Asiatic brother; but his ear is nearly three times as large as that of the latter, and his skin has fewer hairs upon it.

"He is a vicious brute, and often turns on his hunter and puts him to a rapid flight. I have read of an Englishman who was one day chasing an African elephant, and, after a great deal of manœuvring, got near enough to give him a shot. It was fortunate for the hunter that he was well-mounted and had a firm seat in his saddle, as the wounded elephant turned after the shot was fired and crashed through the bushes in the direction of his assailant. Horse and rider had a narrow escape, and the two dogs that accompanied the sportsman came in for a share of the fright. The hunter concluded that he would let the elephant go his way unmolested; and when the enraged animal turned back into the forest he was not followed."

"It reminds me," said the consul, "of the story of the army officer in India who was asked if he found tiger-hunting a pleasant amusement. 'Hunting the tiger,' said he, 'is very pleasant as long as the tiger is hunted; but when he turns and hunts you, the pleasure ceases altogether.'"

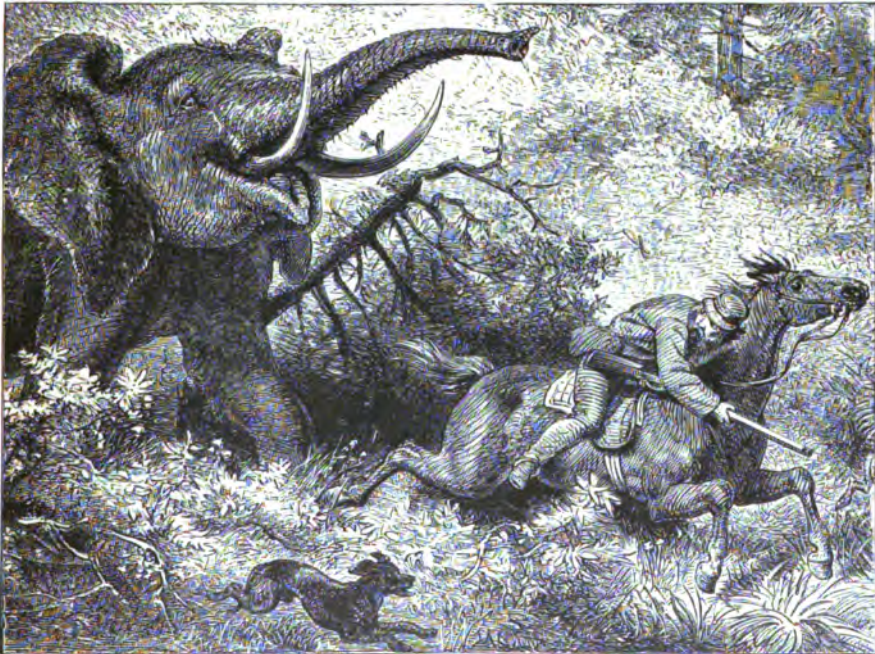
"It is about the same with the chase of the wild elephant," the Doctor remarked. As he said it, the servant announced the readiness of

something to eat in the cabin, and the conversation was suspended until the party was seated at table.

"In some parts of the East," Doctor Bronson continued, "it is the custom for princes and kings to give grand entertainments in the shape of elephant fights. Sometimes two elephants are matched together; but quite as often they are pitted against some other beast. Formerly these fights were carried on till one of the combatants was dead or severely hurt; but at present an effort is made to keep them from injuring each other, and the fight is little more than a series of rather violent pushes from one side of the ring to the other.

"Mr. Crawford, who was sent at the head of an embassy from the Governor-general of India to Siam and Cochin China in 1821, was present at a tiger and elephant fight in Saigon. His account is interesting in two ways; it shows the manner of conducting one of these fights, and gives us a glimpse at the manners of the Far East sixty years ago. After detailing his reception by the governor, he says:

"We were invited to be present at an elephant and tiger fight, and for this purpose we mounted our elephants and repaired to the glacis of the fort, where the combat was to take place. A great concourse of people had assembled to witness the exhibition. The tiger was secured to



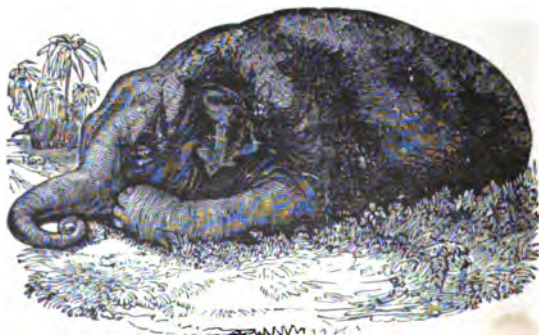
THE HUNTER HUNTED.

a stake by a rope tied round his loins, and about thirty yards long. The mouth of the unfortunate animal was sewn up, and his nails drawn out; he was of large size, and extremely active. No less than forty-six elephants, all males and of great size, were seen drawn out in line. One at a time was brought to attack the tiger.

"The first elephant advanced, to all appearance, with a great show of courage, and we thought, from his determined look, that he would certainly have despatched his antagonist in an instant. At the first effort he raised the tiger on his tusks to a considerable height, and threw him to the distance of at least twenty feet. Notwithstanding this, the tiger rallied and sprung upon the elephant's trunk and head, up to the very keeper, who was upon his neck. The elephant took alarm, wheeled about, and ran off, pursued by the tiger as far as the rope would allow him. The fugitive, although not hurt, roared most piteously, and no effort could bring him back to the charge. A little after this, we saw a man brought up to the governor, bound with cords, and dragged into his presence by two officers.

"This was the conductor of the recreant elephant. A hundred strokes of the bamboo were ordered to be inflicted upon him on the spot. For this purpose he was thrown on his face on the ground, and secured by one man sitting astride upon his neck and shoulders, and by another sitting upon his feet, a succession of executioners inflicting the punishment. When it was over, two men carried off the sufferer by the head and heels, apparently quite insensible.

"While this outrage was perpetrating, the governor coolly viewed the combat of the tiger and elephant, as if nothing else particular had been going forward. Ten or twelve elephants were brought up in succession to attack the tiger, which was killed at last, merely by the astonishing falls he received when tossed off the tusks of the elephants. The prodigious strength of these animals was far beyond anything I could have supposed. Some of them tossed the tiger to a distance of at least thirty feet, after he was nearly lifeless, and could offer no resistance. We could not reflect without horror that these very individual animals were the same that have for years executed the sentence of the law upon the many malefactors condemned to death. Upon these occasions, a single toss, such as I have described, is always, I am told, sufficient to destroy life."



TAKING A NAP.

## CHAPTER XIII.

## BANG-PA-IN TO BANGKOK.—STUDIES IN NATURAL HISTORY AND BOTANY.

AS they returned down the river the boat stopped at Bang-pa-in, to enable the young tourists to have a view of the place. The name means, "City on an Island," and is a literal description of the situation. The island is not very wide in proportion to its length, and the boys found that the beauties of the spot were quite up to the expectation they had formed during their journey up the river. They walked through the gardens, which were laid out with exquisite taste, and sat beneath the trees, whose dense foliage afforded a grateful shade; they were shown through the palace, found it furnished in European style, and their sharp eyes caught sight of a piano, which gave a hint of the musical taste of the king. The officer in charge of the place showed an album of monographs which his majesty had arranged, and some pencil sketches that were the work of the royal hands. The boys were consoled for the absence of the king by the reflection that if he had been present the palace would not have been open to visitors, and some of the interesting sights of Bang-pa-in would have escaped them.

When they reached the landing to continue their journey, they found a native boat along-side their own with fruits and other things to sell. By direction of Doctor Bronson, the interpreter bought a selection of what was in the market; and, as soon as they were again in motion, the boys employed their eyes and palates in a scientific investigation of the good things before them.

The first article that they discussed was a green cocoa-nut. Frank wondered what use they could make of it, and Fred suggested that they might keep it till it was ripe.

One of the servants speedily put an end to their suspense. With a dexterity that was evidently the result of long practice, he cut away the husk, and then made a hole in the shell of the nut large enough for the easy insertion of one's thumb. The opening revealed the interior of the nut, with a slight accumulation of white pulp close to the shell, while all



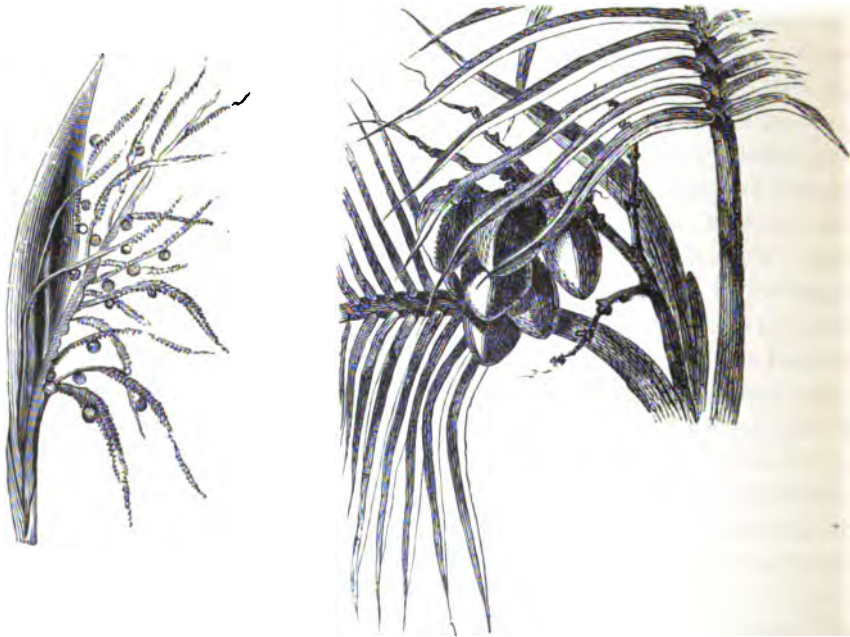
the rest of the enclosed space was filled with milk. When it was thus prepared he handed the nut to Frank, and immediately opened another, which he gave to Fred.

Frank laughed, and said, "What shall we do with it?"

"Drink the milk, and throw away the shell," replied the Doctor, as he took one from the hands of the servant, and suited his action to his words.

The boys did as they were directed, and the drink was followed by an exclamation of delight.

They found the milk of the cocoa-nut a cool and refreshing beverage; and, on the assurance of the consul that they might take all they wished without fear of injury to their digestion, they proceeded with the demo-



COCOA-NUTS FULL GROWN AND JUST FORMING.

lition of more and more nuts, until the basket was emptied. The consul told them that the juice of the green cocoa-nut was a favorite beverage throughout Siam, and was considered by some people as far safer to drink than the water of the river.

"There is a good deal of vegetable matter in the river water," said he, "and it is undoubtedly the cause of derangements of the stomach

when freely used. But the juice of the nut is pure and healthy, and its slightly acid taste makes it welcome to the palate. It is cool, as you have seen, and the acidity doubtless causes it to seem to be of a lower temperature than the surrounding atmosphere."

Fred asked if the famous bread-fruit was in the lot they had bought, and was rather disappointed at its absence. But a bread-fruit tree was pointed out to him as they floated down the river, and he made note of the fact that it was about forty feet high, and had a leaf nearly two feet long. The fruit resembled a large, very large apple, or perhaps a small melon; and the Doctor told him that the outer husk furnished a fibre like that of the cocoa-nut, which could be made into a sort of coarse cloth.

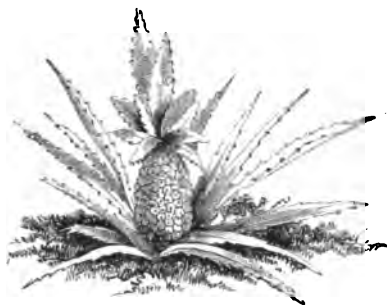


THE BREAD-FRUIT.

The Doctor further explained that the bread-fruit was baked in the shell, the same as an oyster is roasted, and that the inner pulp, when thus cooked, resembled a sweet-potato in taste, and was very nutritious. To the touch it was not unlike the soft part of a loaf of bread, and its name was due to this latter quality rather than to its taste. "It forms," said he, "the chief sustenance of the inhabitants of many of the islands of the South Pacific Ocean, and is to be found nearly everywhere in the tropics. It was introduced into the West Indies about a century ago, and its cultivation has been very successful in that region; later it was planted in Central America, and has become so well known and used that the natives rely largely upon it for their food. The product of three trees in some of the Pacific Islands will support a man for a year; and it is no wonder that he becomes lazy when he has nothing to do but pluck his food from a tree."

When they had finished with the cocoa-nuts, they had a fine pineapple; and they remarked that its freshness made it sweeter and better than any pineapple they had ever eaten at home. Frank made a sketch of this fruit, with its long and sharp-pointed leaves, and then he drew the inside of a fruit which, for want of a better name, he called a star-apple. It had a purple skin, and resembled an orange in shape and size; the pulp was white, and, when it was cut across, the cells for the seeds showed the exact form of a star. Fruit after fruit was cut, in the hope that one would be found without the star; but the effort was a complete failure.

Of course they had oranges in abundance; and they had half a dozen fruits whose names were quite unknown to them, but which were all delicious. Fred lamented that the attempt to tell about the flavor of a



PINEAPPLE.



STAR-APPLE.

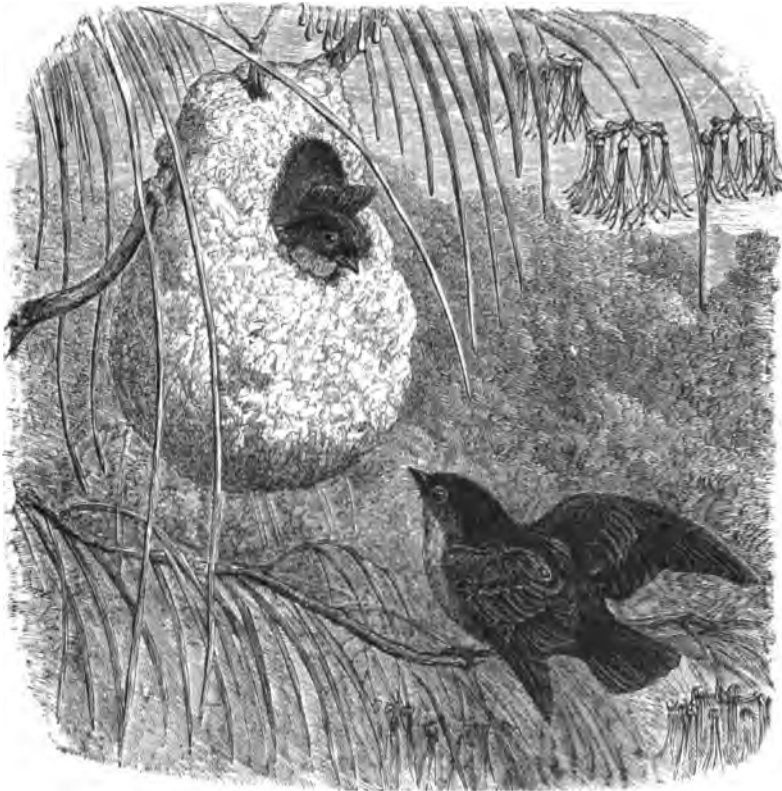
strange fruit was like trying to describe the song of a bird, or the perfume of a flower. So they concluded that the best thing for them to do was to eat the fruit and admire it; and if anybody wanted to know what it was like, he would refer him to the article itself, and let him judge of the quality.

While seated on the deck of the boat, and engaged in testing the peculiarities of an orange, Frank espied something on a tree that grew close to the water. Thinking it might be a new kind of fruit, he called the Doctor's attention to his discovery; the latter said the strange thing was nothing more nor less than the nest of a bird, and would hardly prove edible. Frank's illusion was broken, as the Doctor spoke, by a small bird that hopped on a limb in front of the supposed fruit, and at the same instant the head of another bird appeared from a hole in the nest. Evidently the nest was constructed of cotton, or something of the sort, as it was nearly snow-white in color; it hung from the limb, so that it swayed in the wind, and it was not at all surprising that Frank had mistaken it for a variety of fruit hitherto unknown to him.

"That nest is not so remarkable," said the Doctor, "as the one made by the tailor-bird, an inhabitant of Siam and the tropical parts of India and Malacca. It chooses a leaf on a small twig, and then proceeds to puncture a row of holes along the edge with its beak, just as a shoemaker uses an awl for making holes in a piece of leather. When it has thus perforated the leaf, it takes a long fibre from a plant, and passes it through the holes. The operation of sewing is imitated with great exactness, and the fibre is pulled, like a thread, until the edges of the leaf are drawn towards each other and form a hollow cone. If the bird can-

not find a single leaf large enough for its purpose, it sews two leaves together; and instances have been known where three leaves were used. When the framework of the nest is completed, the bird fills the interior with the softest down it can gather from plants, and it thus has a home which it is next to impossible to discover among the leaves. There is another bird that lives near watercourses and marshes, and constructs a nest by sewing the reeds and rushes together; but its work is not so perfect as that of the tailor-bird, and does not entitle him to equal credit."

Frank was anxious to obtain one of these nests as a curiosity, and was gratified, on his return to Bangkok, to find one for sale in the hands of a native. He bought it, and had it carefully packed, so that he could



A NEW KIND OF FRUIT.

send it home without fear of injury in the next box of curiosities they should despatch to America.

From birds the conversation wandered to fishes, and the boys learned

something that caused their eyes to open with astonishment. Lest it

should be forgotten, it was entered in both their notebooks, and read as follows:

"There is a fish in Siam, and other parts of the East, that has the remarkable peculiarity of going overland from one pond to another. When the water where they are dries up, the fishes start for the nearest pond, though it may be several miles away; and they propel themselves by means of their fins, very much as a turtle drags himself with his feet. Their instinct is unerring, and they have never been known to make a mistake about heading for the water that is nearest. It is said that you



TAILOR-BIRD AND NEST.

may take one of them up and turn him around half a dozen times, till he is dizzy, but he will not lose his points of compass. When he is put down again he takes the proper direction, and though you put him off the track ever so many times, he always returns to it."

"We shall next hear, I suppose, that there are fishes that climb trees," Fred remarked, as he finished his note on the fishes that go overland.

"Quite possibly," Frank replied; "let us ask the Doctor."

They asked the question, and were taken somewhat aback when Doctor Bronson answered in the affirmative.

"I don't know," said he, "if there are any fish in Siam that climb trees, but there is one in Brazil that can perform this feat. He does not ascend a perpendicular tree, but when he finds one that slopes at an angle of about forty-five degrees, and has its roots in the water, he will venture on an excursion in the air. His scales are very large, and he works himself forward by a motion of the lower ones as they press against the bark of the tree. He hugs the tree with his fins in order to maintain his balance; his movements in climbing are very slow, and he certainly appears to better advantage in the water, where he is a rapid and graceful swim-



mer. You see that a fish out of water is not always the unhappy creature he has been supposed to be by most persons."

"I heard somebody say one day," said Fred, "that oysters grow on trees in some parts of the world. Is that really so?"

"Certainly," was the Doctor's answer; "they do grow on trees, but not in the way you are naturally led to suppose."

"How is it, then, Doctor?" queried Frank.

"It is quite simple when you understand it," was the response. "The spawn of the oyster floats in the water, and attaches itself to the first thing with which it comes in contact. It frequently happens that, at high-tide, the water comes up a little way on the trunk of a tree, or it may be that a limb of a tree hangs in the water. The oyster-spawn is attached to the trunk or limb, as the case may be, and when the tide



A CLIMBING-FISH.

goes away it remains there. It has enough vitality to live until the tide comes again; it retains its hold, and in course of time becomes an oyster growing on a tree. He could not live altogether without water, but he

can easily get along during the intervals of the tides. He does not grow on a tree like an apple or an orange, but he certainly makes the tree his home."

"Do they have oysters in Siam?" one of the boys asked.

"Oysters grow in the Gulf of Siam," was the reply; "but they are not equal to those of the Atlantic coast of the United States. As for that matter, no oysters in any part of the world can or do equal ours; at least in the opinion of residents of the United States. Here in the East Indies they have some very large oysters; there is one variety that often attains a weight of three hundred pounds; it is not good for anything, however, and you never hear a man in a restaurant calling for a dozen of this variety on the half-shell.

"Naturalists have described about sixty varieties of oysters in different parts of the world, and it is said that more than two hundred species of fossil oysters have been found by geologists. Most of these forms are now extinct, and, therefore, we have no way of determining whether all of them have been good to eat or otherwise. It is often remarked that the first man who ate an oyster must have been very brave, and it is a pity that his name has not come down to us. One version of the story is that he thrust his fingers into an open shell which he saw lying on the sea-shore; the oyster was angry at this intrusion, and immediately closed on the fingers, very much to the man's astonishment. It required a great deal of wrenching to liberate them from the shell, and they were somewhat injured in the operation; the man naturally put his fingers in his mouth to relieve the pain, and in so doing he learned the taste of the oyster. Having learned it, he immediately smashed the shell with a stone and devoured the contents, and he continued to eat oysters till he had made a hearty meal. Always after that, when he was hungry, he went to the oyster-bank and satisfied his appetite, and from being thin as a skeleton he grew fat and rosy. His neighbors noted the change, and one day when he was proceeding stealthily to his favorite retreat they watched him and found his secret. When it was once out, the news spread with great rapidity, and thus was inaugurated the habit of eating the oyster. When this occurred no one knows; but the fact is that the ancient Romans and Greeks were fond of the oyster, and esteemed it greatly as an article of food.

"Another remarkable fact is—"

Before the Doctor could finish the sentence, Frank sprung to his feet in an excited manner, and pointed to a tree that stood not twenty feet from the bank of the river.

"See that great snake!" he shouted; "and see that squirrel in front of him!"

A snake was coiled around the limb of the tree with his neck bent, and his head slowly waving in the air. His body glistened in the sunlight as it played on his scales, and Frank fancied he could see the fire darting from his eyes. A foot or so in front of him was a squirrel, sitting on his haunches, and with his tail erect; his eyes were fixed on the serpent, and he was chattering wildly, and as if greatly alarmed.

While they looked at the strange spectacle, the head of the snake was darted forward, and in an instant the poor little squirrel was transfixed



THE SNAKE AND THE SQUIRREL.

by the deadly fangs. Frank wished they had been able to save the squirrel by killing the snake, but his wishing was of no avail, as they were moving down the stream; and, besides, they had no fire-arms with which the serpent could have been disturbed in his retreat up the tree.

"I suppose the squirrel was charmed by the snake," said Fred, as soon as they had passed out of sight of the tree.

"As to that," replied Doctor Bronson, "there is much dispute. Many persons who have studied the subject are positive that snakes have the power of charming or fascinating small birds and animals; and others,

who have studied it quite as much, deny that any such power exists. I have heard so much on both sides, that I am not able to form a positive opinion. I am inclined, however, to believe that the power is possessed by certain snakes, as I have seen manifestations of it, or something very like it. When I was a boy in the country, I one day saw a large black snake in an apple-tree on my uncle's farm. A bird was hopping around on the limbs in great alarm, as I judged by his twitterings; he seemed to be terribly afraid of the snake, and at the same time unable to get away from him. I watched his movements for nearly half an hour, and observed that each time the bird moved he came nearer to the snake; and the performance ended by his lighting on a branch within a foot of where the latter was coiled. Then the snake darted his head forward and seized the bird, precisely as you saw that scaly fellow, a few moments ago, seize the squirrel.

"Exactly what the process of charming is, if it really exists, it is difficult to say. Probably the victim is paralyzed, to some extent, by the horrible appearance of the serpent, and deprived of the use of his limbs. If you suddenly come in contact with a ferocious wild beast, or some terrible danger is presented to you, it is not at all improbable that you will be unable to move from sheer fright. I am inclined to believe that the fascination of birds and small mammals by serpents is something of this sort, but I confess my inability to explain why the victim, in moving around, comes every moment nearer to his destroyer, as though he could not remove his eyes, however much he might wish to do so."

"If you travel around much in Siam," the consul remarked, "you will find all the snakes you care to see. It is not unusual to see them swimming in the river; and in the rainy season they frequently get into the houses, particularly those that float on the water. Most of them are harmless, but there are some poisonous ones, including the famous *cobra di capella*."

Frank thought he would prefer not to live in a floating house, for the present at least; and his opinion was shared by Fred. They were not at all enamored of the idea of having an intimate association with the wandering snakes of Siam.

"I think," said the Doctor, "that if you were compelled to select some of the inhabitants of the Siamese forests as your companions, you would prefer monkeys to snakes. In the region north of here you could find an abundance of them, and of all sizes; they run wild in the forests, and sometimes are found in large droves. They are sociable beings, and very fond of each other's society; and if one of them gets into trouble,

his companions are quite likely to come to his relief. A friend of mine was out hunting one day, and saw a monkey on a tree where a fair chance for a shot was presented. He fired and wounded the monkey, who immediately set up a piteous howl; in a few minutes dozens of monkeys were around him, and they seemed to understand that my friend was the cause of the trouble. He fled, and they pursued him; he fired his gun to frighten them, and, after knocking several of them over, he reached an



MONKEYS AT HOME.

open space of country, and was allowed to go on undisturbed. If he had been without his gun he would not have escaped so easily.

“Monkeys have a good many enemies besides man. Wild beasts de-



vour them, and occasionally snakes manage to take them in; the fellows are so active that they can only be captured by strategy, or their own



carelessness and curiosity; and they often fall victims to the last-named quality. A tiger will lie down and pretend to be dead; the monkeys see him, and draw near to investigate. They approach cautiously, stop frequently, and do a deal of chattering. If the tiger stirs a muscle, they take the alarm at once and are off; but if he lies perfectly still, they are sure, in a lit-

tle while, to come so close that one of the boldest will venture to pluck at his hide. As he does so he jumps several feet to one side, and if the tiger should rouse himself he would be baffled of his prey. He continues to lie as if dead; and finally the monkeys, believing he is really nothing but a carcass, proceed to sit on him and hold a coroner's inquest. Now is the tiger's chance; and with a sudden spring he has one of the fattest in his jaws, while the rest scamper away to the forest.

"Another enemy of the monkey is the eagle. When the monkeys are playing in the branches of a tree the eagle swoops down with great rapidity, and carries one of the party off in his powerful claws. Often there is a fearful struggle in the air, as the monkey is not inclined to die without a protest; and as he has a great deal of strength, and is full of activity, he occasionally comes off victorious and escapes, though he may be killed by the fall from the height where the eagle drops him. A gentleman of my acquaintance once witnessed the capture of a monkey by an eagle; the eagle fastened his claws in the back of the monkey, and, though the latter struggled violently, his hold was not once broken. The eagle flew to the top of a distant tree, where he undoubtedly devoured his victim at his leisure.



"In seizing a monkey, the eagle always endeavors to grasp him by the back and neck, one claw being in the neck, and the other farther



EAGLE CAPTURING A MONKEY.

down. The reason of this is that, unless the monkey is firmly held by the neck, he will turn his head and inflict a terrible bite on his assailant; but as long as the neck is thus held he is powerless. It is said that the first thing the eagle does, after taking a monkey, is to put out his eyes with his powerful beak; but in so doing he is in danger of having his head seized by the monkey's paws."

"On the whole," said Frank, "I don't think I care about forming an intimate acquaintance with the monkey."

Fred was of the same opinion, and the subject of conversation was changed.

## CHAPTER XIV.

## THE KING IN HIS STATE BARGE.—BETEL AND TOBACCO.

ON their arrival at Bangkok, our friends found that the king had returned, and was to begin on the following day his annual visits to the temples of the city. Once a year he goes in state to the temples, and about two weeks are consumed in making the rounds of all of them. The Siamese attach much importance to this ceremony, as their country is considered the principal seat of the Buddhist religion, and the king is its first defender. Therefore it is considered necessary that he should worship officially at the shrines of the leading temples of the capital, in addition to his daily worship in the temples attached to the grand palace.

The consul arranged to accompany Doctor Bronson and the youths to one of the temples the king was to visit, so that they might see the procession, and have a glimpse of the ruler of Siam. About ten o'clock in the forenoon they left the hotel in their boat, and a half-hour's pull up and across the river brought them to the spot. They spent a little while in the inspection of the temple and its surroundings: they had visited the same temple in the first days of their stay in Bangkok, and therefore many things were familiar to their eyes. But where it had been quiet before all was now activity, and there was a considerable assemblage of people, who had come, like themselves, to witness the ceremony.

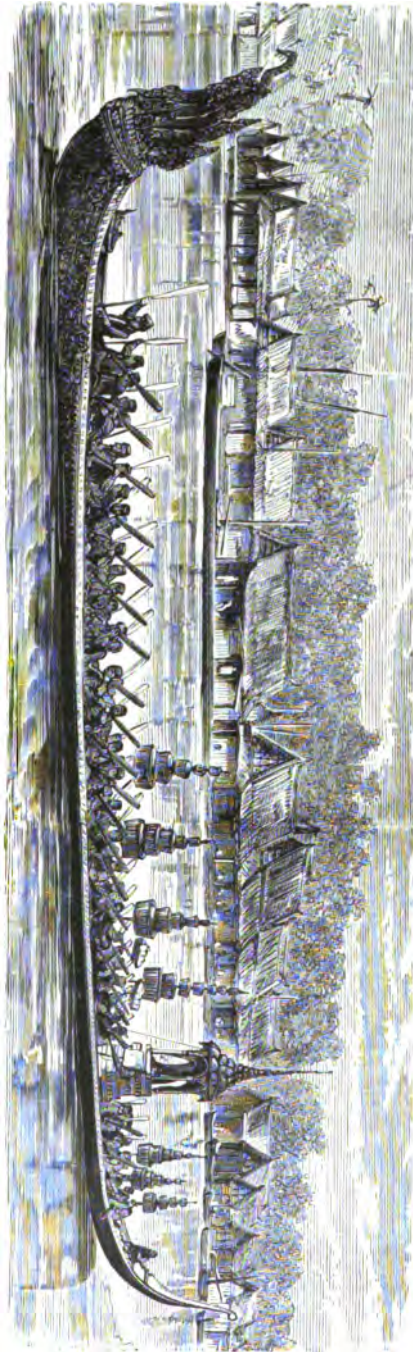
After a time there was a stir, and the announcement was made that the king was coming. The boys looked up the river in the direction of the palace, and, sure enough, there was the royal procession; and it was a sight that almost took away the breath of both Frank and Fred.

There was a flotilla of a dozen or more boats and barges of the most gorgeous description our friends had ever seen. The largest of them was occupied by the king, and had a hundred and twenty men to row, or rather to paddle it. The boat was said to be fifty yards in length, but nobody was able to say positively what were its exact dimensions; at any rate, it was long enough and handsome enough to satisfy the most fastidious spectator. The rowers were in a double line, and in scarlet uni-

forms; at each stroke they raised their paddles high in air, and their movements were so timed that the paddles on both sides were dipped at exactly the same moment. The boat sat quite low in the water, and its stern had a sharp and high curve to it that doubtless made the middle of the craft appear lower than it really was. The bow was bent upwards as high as the stern, and Frank thought it could not be less than ten or twelve feet out of the water. It appeared to be much heavier than the stern, and was fantastically carved; the Doctor told the boys that the carving was intended to represent the *Nagha Mus-takha Sapta*, or seven-headed serpent, which is one of the mythological deities of Siam.

Considerably nearer to the stern than the bow there was a sort of throne elevated on four pillars, and having a gorgeous canopy above it. On this throne the king was seated; the canopy had a spire like that of some of the temples, and consequently the seat in the barge possessed a certain religious character. Near him were attendants holding canopies not altogether unlike umbrellas, and at a distance these canopies suggested the appearance of golden cones. The boat was driven rapidly through the water by the powerful arms of its rowers, and their movements were timed by a man waving a

STATE BARGE OF THE KING OF SIAM.



huge baton, after the manner of the drum-major of a brass band. The other boats moved at the same speed; they were smaller than that of the king, some of them having no more than thirty or forty rowers; and they belonged to the Siamese nobles and ministers of state, who were required to accompany the king on his official visits to the temples.

The gilding and bright colors on the boats were fairly dazzling to the eyes of the young travellers. In all their travels hitherto, they had seen nothing half as gorgeous as this spectacle, and Frank was inclined to pinch himself to make sure he was not dreaming. He was destined to be still more astonished when told that the king's boat was inlaid with mother-of-pearl and crystal, and with sparkling shells and bright stones, so that it resembled a piece of jewellery for the use of a giant such as the world never saw. He wondered what must have been the cost of such a boat, but there was no one who could tell him.

Soon the boat was at the little platform which served as a landing-



A BODY OF THE ROYAL GUARDS.

place in front of the temple. A file of soldiers, uniformed somewhat after the European manner, and carrying rifles of foreign manufacture, was drawn up near the path where his majesty would pass on his way to the temple door; they were commanded by an officer whose complexion was of the Siamese tint, and who spoke English so fluently that the boys thought he must have had a most excellent teacher, and been a very apt pupil. They were undeceived when they learned that he was a native of Philadelphia, and formerly served in the army of the United States. Doctor Bronson observed that the soldiers were well drilled, as they went through the manual of arms with the precision of a regiment of English or American infantry.

The Siamese army is drilled after the European manner, and has had drill-masters from the United States and half the countries of Europe in the last thirty years. The navy is also under foreign management, and



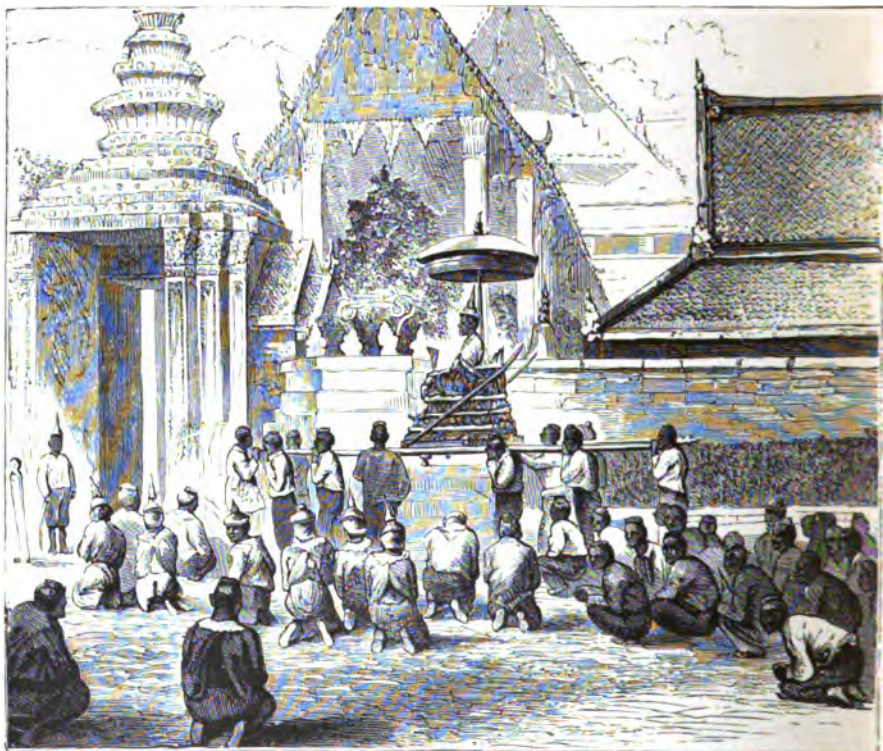
the harbor-master of the port of Bangkok is an Englishman, who has lived there a long time. Several foreigners are in the custom-house and other official service, and the steamers of the navy have European engineers. The foreigners in the Siamese service are well paid, and generally get along easily with the natives. Some of them are greatly trusted by the king, and have shown themselves fully worthy of the royal confidence.

In time of war the entire male population of the country capable of bearing arms is liable to be called out, and every man is bound to serve as a defender of his nation. Whenever soldiers are wanted, the king sends a command to the governors of the various provinces, and tells them what their quota will be, and they are expected to comply immediately with the demand. The troops thus levied are fed and clothed and armed at the expense of the government, but they do not receive any pay in money; and when the emergency for which they were wanted is passed they are dismissed and sent home. The standing army in time of peace is quite small, and the soldiers are fed and clothed, and their pay in money is about six dollars a month. The Siamese navy contained, at the time our friends were at Bangkok, about a dozen steam gun-boats, carrying from two to ten guns each, and several new vessels were on the stocks in the royal dock-yards. A large naval force is not needed in Siam, and the king wisely refrains from expending a great deal of money on useless ships of war.

The king stepped ashore on the little platform previously mentioned, and mounted a sedan-chair, on which he was to be carried to the temple. His head was protected from the sun by a canopy like a large umbrella; and both the seat and canopy were gayly decorated, and shone with gilding. As the bearers proceeded with their royal burden, the people knelt in homage to their ruler, and the strictest silence was observed. One after another the nobles and high officials landed from their boats, and proceeded to the temple, surrounded or followed by their attendants. It was a novel spectacle to the boys, this procession of dignitaries, and they watched it with great interest. Each of the officials had a man to carry his pipe and tobacco, another for his betel-box, another for his tray, holding a teacup and a pot of tea; and some of them had two or three others for the transportation of various things. The betel-boxes were of gold, and most exquisitely wrought, and they must have cost a great deal of money to make. The prime-minister was the last to arrive, and the boys were told that the ceremony would not begin till he had entered the temple.

The strangers were not invited to see the services inside the building,

and therefore they remained where they were till the king came out and returned to his boat. The ceremony lasted about half an hour, and consisted of the repetition of prayers by the priests, and responses by the king; it was said to be not unlike the celebration of mass in a Catholic church,

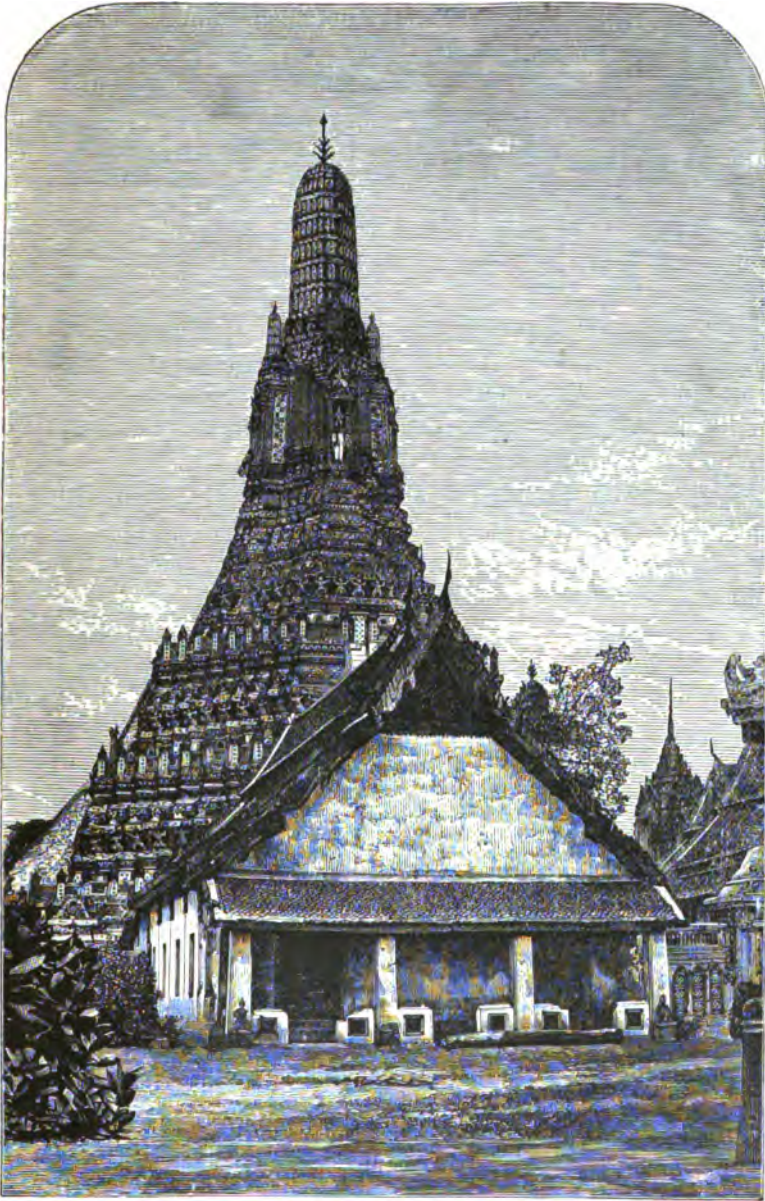


THE KING VISITING A TEMPLE.

and it has been remarked by many visitors to the Far East that the forms of Buddhist worship have a considerable resemblance to those of Rome.

The king went to his boat, which was drawn up to the platform as before; and as soon as he was seated, the signal was given to the rowers to move on. Away they paddled to another temple, situated up one of the canals; and the other boats followed the royal one as rapidly as possible. By taking a path through some gardens near the temple, our friends reached a point on the bank of the canal where they could see all the boats as they went along.

After the procession had gone the boys wanted to ramble through the tall grass, but changed their minds when told that possibly they might



THE FRONT OF THE TEMPLE.

encounter a cobra or some other deadly snake. Cobras are not unfrequently found around the Siamese temples; and though accidents are not of common occurrence, there are enough of them to make a stranger careful about his promenades.

It was past noon, and the heat of the sun was not of the lightest. The Doctor suggested a return to the hotel, and the boys were quite willing to accept it, as they wanted to think over the strange spectacle they had witnessed. They thought they had done quite enough for one day, and considered that they had been very fortunate in seeing the king, and witnessing one of the pageants for which Siam is celebrated.

On their way back in the boat, Frank asked the Doctor to tell him something about the use of the betel-nut. They had observed that the king was vigorously chewing the substance, which is to the Siamese what tobacco is to many Americans, and the ministers of state were following his example. All classes of people indulged in the amusement, and their mouths had a reddish appearance in consequence.

"The leaf of the betel-pepper," said the Doctor, "and the nut of the areca-palm are prepared as follows: the nut is sliced quite thin, and a little quicklime is sprinkled on it, so as to give it a pungent flavor, and the two substances are then wrapped in the leaf. In this form it is taken into the mouth and chewed, and the operation is generally performed with a very vigorous action of the jaws. The saliva has a reddish tint, and it is so bright that many strangers are deluded into the belief that the natives are spitting blood. The practice of chewing this substance began originally in the Malay peninsula, but it has gradually spread all over India, the countries of Indo-China, and the Malay Archipelago. Would you like to try it?"

The boys had the curiosity to make an experiment with the betel-nut; and, as soon as they reached the hotel, the Doctor made their wants known to the landlord. In a little while some of the substance was brought, and the youths ventured to chew it.

A very short trial was quite sufficient. They found the taste anything but agreeable; and Frank thought the same sensation could be had by dissolving in the mouth a piece of alum as large as a small pea, or a more extensive piece of lime. The delusion might be kept up by adding any common leaf and a few grains of pepper, and Fred was confident that it would require a long time for him to be accustomed to it. "Of course," said he, "one might learn in time to like betel, just as men in America learn to like tobacco; but, as far as I can judge, the taste of tobacco is the less disagreeable of the two."

The astringency of the betel-nut was removed from the tongues of the experimenters by a free use of the milk of green cocoa-nuts; and each of the boys made a quiet promise to himself that he would not learn to chew betel for anything in the world.

"And we may as well include tobacco," said Frank, "and leave it to rest at the side of betel. I certainly don't like the process of chewing betel, and it is no worse than that of chewing the favorite weed of America."

Fred agreed with his cousin, and the two concluded that they would not adopt the habit of many of their countrymen. Just then it occurred to them that they had not seen any other people than their own using tobacco in this form, and so they asked the Doctor if the habit was exclusively an American one.

"Practically so," was the Doctor's answer. "In no other country than ours is the habit of chewing tobacco at all prevalent; a few sailors and others who have lived or been in the United States have adopted and carried it home, and these are virtually the only people not Americans who indulge in it. Other nations are far greater smokers than ourselves, but we have very nearly a monopoly of chewing the leaf of the famous plant of Virginia."



THE TOBACCO-PLANT.



SIR WALTER RALEIGH AND HIS PIPE.

One of the boys asked if tobacco was not first found in America; he thought he had read that it was used by the Indians at the time of the discovery of the Western Continent by Columbus, and was introduced to Europe by Sir Walter Raleigh.



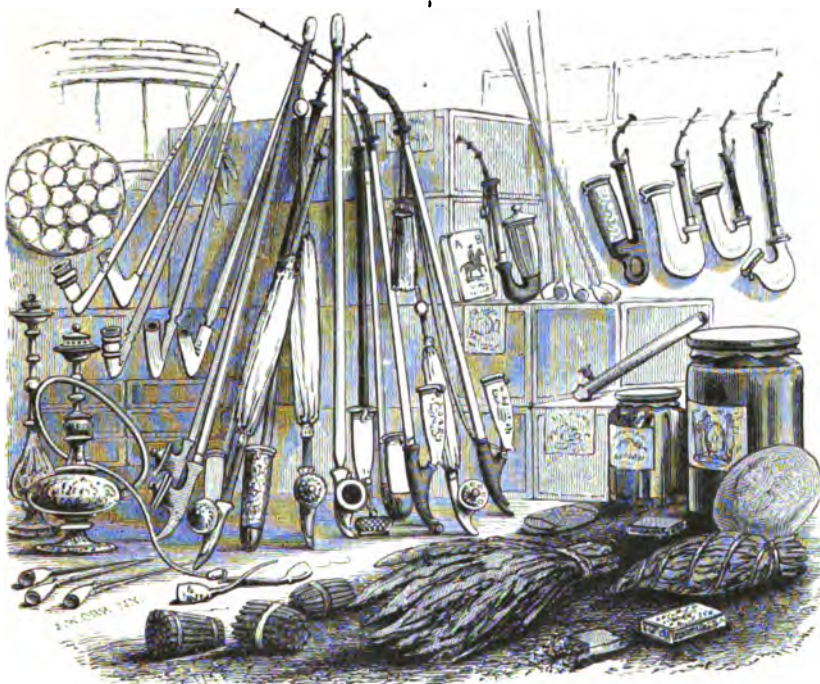
"I am unable to answer your question with exactness," said the Doctor, "for the simple reason that the matter is involved in obscurity. It is said by some historians that the sailors accompanying Columbus were one day greatly astonished at seeing smoke issuing from the mouths and nostrils of some of the natives, and they found, on investigation, that it was produced by the combustion of a fragrant herb or plant. On their return they introduced it into Spain and Portugal. In 1560 Jean Nicot was ambassador of France at the Court of Lisbon, and learned the use of tobacco from a merchant who had been in America. When he next went to France, he presented the weed to the queen, and it soon became known throughout Europe. From him it was called *L'herbe Nicotienne*, or "the Nicotian weed," and the name has come down to our times. Near the same period Sir Francis Drake introduced it into England, and Sir Walter Raleigh made it fashionable; so rapidly did the use of it spread that in less than twenty years nearly every class of society was addicted to it.

"Some writers contend that tobacco, or some similar plant, was smoked in Asia long before the discovery of America; in proof of this they assert that the pipe in nearly its present form is to be seen on many ancient sculptures; and it is certainly singular that a people so conservative as the Chinese and other Asiatics should have made the use of tobacco universal in the comparatively short period that has elapsed since its discovery in America. On the other hand, we can infer that it was not known in Asia as early as the eighth century, because the tales of the Arabian Nights, which are supposed to be a perfect picture of the customs of that time, make no mention of smoking."

"Does Marco Polo make any mention of it in his travels in Asia?" Fred asked. "If it had been known in his time, I think he would have been pretty certain to say something about it."

"I believe he makes no allusion to it," the Doctor responded; "and this fact is quoted by those who contend that the practice was of American origin. But, whatever the origin of smoking tobacco, the custom has spread over the whole globe, and prevails among savages no less than among the most civilized and enlightened nations. All classes of people, from highest to lowest, are smokers; and, though the practice has been the subject of severe penalties, it has continued to spread. Laws were passed against it by several governments. In Russia, smokers were punished by having a pipe-stem passed through the cartilage of the nose for their first offence; and for a second, they were ordered to be flogged to death. Sultan Amurath IV. ordered that all smokers should be strangled; and in Switzerland it was officially announced that the use of tobacco was one

of the sins forbidden by the Ten Commandments. The Popes of Rome issued edicts against it; and one of them, Urban VII., decreed the excommunication of all who should use tobacco. King James wrote the famous 'Counterblast against Tobacco,' and other publications were made condemning the importation of Sir Walter Raleigh; but all to no purpose. The practice could not be put down; and to-day there is no article of luxury or dissipation that is so universally known as tobacco.



PIPES OF ALL NATIONS.

"There are about forty different varieties of tobacco described by botanists which are smoked, or chewed, or snuffed, in various parts of the world. By far the greater part of the tobacco used annually is smoked, and in some countries snuff-taking, like chewing the weed, is practically unknown. In nine cases out of ten in America the use of tobacco begins by smoking, and in other countries the proportion is probably a hundred times as great. The tobacco used in Asia and in some parts of Europe is much milder than that of America. England is the largest consumer of strong tobacco outside of the United States, and the revenue derived from it by the British custom-house goes far towards paying the expenses of the government.



YOUNG AMERICA.

“Tobacco was first smoked in pipes, and all the early representations of smokers contain no picture of the cigar. Sir Walter Raleigh used a pipe which was much like the one most popular in England at the present day, and it was not till long after his time that the leaf, rolled into a cigar, became fashionable. Different nations have adopted different forms for the pipe; and it is noticeable that the more indolent the people the longer is its pipe-stem. With the English and American pipe the smoker can enjoy himself while employed, but with the Eastern pipe he can do nothing else while smoking. With a cigar, or a short pipe, a man may write or work; but when he takes the hookah of Turkey, or the nargileh of Syria and Egypt, his occupation, other than smoking, must be limited to conversation and reading. Each country has adopted the form best suited to its tastes; and it would be the height of absurdity to give the ragged newsboys of New York an Oriental pipe-stem two yards in length, and expect them to enjoy it as they do the short stumps of cigars they gather in the street. On the other hand, the Turkish lady reclining on her divan would consider the short dhudeen of the Irish apple-woman a wretched substitute for the hookah, with its flexible stem and its bowl of water through which the smoke bubbles on its way to her mouth.

“Whether tobacco is injurious or otherwise has been a subject of much discussion, and the advocates on each side have said a great deal that their opponents will not admit. It would require more time than I

have at my command to tell you even a tenth part of the arguments for and against tobacco, and therefore I will not enter upon the discussion of the subject. Volumes have been written upon it, and doubtless other volumes will find their way into print as the years roll on."



THE EAST.



THE WEST.

## CHAPTER XV.

## WOMEN, HAIR-CUTTING, AND SLAVERY.

THE boys occupied themselves very industriously in writing for their friends at home the accounts of what they had seen and heard in Siam. They told of the trip to Ayuthia, and the visit to the elephant corral; of their stay at Bang-pa-in; of the journey down the river; and, finally, of the flotilla of boats and barges, and the state procession of the king to the temples. When they had brought the story down to the hour of writing, there was a day to spare before the closing of the weekly mail to Singapore, and thence to America.

Frank thought it was time for him to say something specially intended for Mary and Effie; he remembered his letter from Japan about the women of that country, and concluded that a similar missive from Siam would be quite in order. Then he recollected that he had seen fewer women in his walks and rides about Bangkok than when he strolled through the streets of Tokio and Kioto, and that in all probability he could not tell as much of the Siamese as of the Japanese women, for the simple reason that he had not learned so much about them. But he was determined to make the effort, and, after talking with the Doctor on the subject, he wrote as follows:

"The dress of the Siamese men is so much like that of the women that a stranger cannot tell at first whether he is looking at the one or the other. I will send you a picture, so that you may understand how they look much easier than if I took half a dozen pages in writing to tell it. You see that a gentleman and lady have the same garments, except that the lady wears a scarf over her shoulders, or rather over her left shoulder, and passing under her right arm. The gentleman has a tiny bit of a linen collar on his jacket, while the lady has none, and he also has wristbands, something after the European model. The trousers are like a piece of cloth four or five feet square, and one corner is tucked under a belt in the centre of the waist; the ladies generally wear brighter colors than their husbands, but the cut of the garment is practically the same.





SIAMESE GENTLEMAN AND LADY.

"Nearly everybody goes barefoot; and when they do put anything on their feet, it is rarely more than a light sandal. The custom of wearing shoes and boots such as we have is never likely to become popular in a country so hot as this is, and where there is no snow or ice. Children, up to five or six years of age, have no garments of any consequence; and even when they are older, their clothing would not shield them from the cold if they were compelled to face a New York winter. A tailor would not make a fortune by coming to Siam and trying to get the people to wear clothes like American ones; and as for a corn doctor, he would have no chance at all where tight boots, or boots of any kind, are practically unknown.

"Then, too, they dress their hair in pretty much the same way, so that you cannot tell a man from a woman by looking at their heads, as you can in most other countries of the world. They shave all the lower part of the head, and leave the crown covered with a tuft, or bunch, that reminds you of a shoe-brush. The men have very light beards, like all Oriental people; and whenever one of them finds that he can raise a mustache or a beard, he is pretty sure to do so, as he wants to look unlike his neighbors. But as a general thing beards do not become the Oriental features, though mustaches do; and when I see a Chinese or a Japanese or a Siamese with a beard, which is not often, I feel like asking him to go home and shave it off.

"The first hair-cutting, at the time a child is twelve or fourteen years old, is a very important ceremony. No matter how poor the parents of a child may be, they manage to have some kind of an entertainment, be it ever so humble, while with the rich a great deal of money is spent on the affair. In the case of a royal child the festivities are on a grand scale, and the whole population is expected to rejoice. We heard something about the ceremony when we were in Cochin-China, and we have heard a great deal more about it since we came here. We wish one was to come off now, but unfortunately there is nothing of the kind in prospect.

"A few months ago the eldest of the king's children reached the proper age for the So-Kan, as the hair-cutting ceremony is called, and for weeks before the event the preparations for it were going on. I cannot do better than copy the account that was published at the time in the *Siam Daily Advertiser*, a newspaper that is printed here by some Americans who have lived a long time in Bangkok. Here it is:

"Princess Sri Wililaxan is the eldest daughter of his majesty the King of Siam; her mother is one of the daughters of his excellency Chow



A YOUNG PRINCE OF THE ROYAL HOUSE, WITH HIS ATTENDANT.



P'raya Kralahome, the Prime-minister of Siam. This princess is consequently the great-granddaughter of his grace the ex-regent, and the granddaughter of the prime-minister.

"It is said that his majesty has fifteen children. Four of these are Somdetch Chowfas. Only one of these Somdetch Chowfas is a son.

"The Somdetch Chowfas are the children of the king, and their mothers are princesses. The son, consequently, who is the eldest Chowfa of the present king is by law and the customs of the country the heir-apparent to the throne.

"When the So-Kan ceremonies take place they must be of the most imposing kind. In the present instance they were continued six days, and on each day there was an imposing procession.



FEMALE HEAD-DESS AND COSTUME.

"The sound of music announced the approach of the procession.

"Soon a company of seemingly masked men, representing Japanese warriors, made their appearance. Then came companies of Siamese military and their band. Then followed companies of Siamese women dressed after the manner of the country, with the right arm and the shoulder bare; and then companies of men and boys and women dressed to represent the contiguous nationalities—Malays, Peguans, Burmans, Laos, Karens, etc. The groups as they passed were quite grotesque.

"His majesty the king ascended to a prominent hall near the Maha Prasat,\* which was handsomely furnished. In front of him, to his right, were a group of pretty and richly-dressed ladies, holding in their hands a small silver tree. They went through the slow motions of a Siamese dance. Groups of Siamese ladies were seated in a line, with the new palace forming one side of a parallelogram. These were spectators, and evidently persons of rank. On the left of his majesty, forming the second long side of the paral-

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\* An immense temple or chapel in the palace enclosure, where the kings are crowned, and where they lie in state for twelve months after their deaths, awaiting the ceremony of cremation.

lelogram, were crowds of Europeans and other foreigners who had been invited to the performance.

“The side wall enclosing the Maha Prasah, on an elevated part of which was the hall in which his majesty sat, formed the west side of the parallelogram. Directly in front of the king was the artificial Trailah, seemingly a mountain of gold, and forming the east side of the parallelogram.

“At the summit of the Trailah was a beautiful gilt edifice dazzling in the sunshine. As soon as his majesty was seated, a group of gayly-dressed lakon girls descended from the gold mountain from the gilt house, and at the base of the mountain, in full view of the king, performed their dance to the sound of native music, of which there was an abundance. On the lawn to the left of his majesty, and in a temporary and beautiful hall, sat his grace the venerable Ex-Regent; his excellency the Prime-minister; his excellency the Foreign Minister, and the principal nobles of the country.

“On the lawn were men who danced and made amusement for the masses.

“When the Princess Sri Wililaxan advanced, seated in a grand sedan, heavily weighted with her crown and gold chains of jewellery, followed by a group of ladies bearing her gold salvers and insignia of rank, she was received by her royal father and placed at his side.

“The mountain Trailah cannot be easily described. Here and there at its base there were representations of the popular plays and acts of the country. The images were moved by machinery, and went through their performances to the merriment of the crowds, who clamored for a repetition of them.

“One represented a court of justice, where two persons were ordered to dive; the one who could remain longest under water rendered his testimony valid. It was amusing to see the artifice of the one who came up first and found his antagonist still under water.

“There were artificial pools containing representations of fish, whose movements amused the spectators.



MINISTER OF FOREIGN AFFAIRS.



“‘There were artificial trees, with representations of animals—such as squirrels, monkeys, birds, and snakes—and their movements were quite life-like.

“‘Each day the princess receives presents from the noble families. The ceremonies of each day were in some respects similar, but varied enough to interest the vast crowds that visit the palace. Abundant refreshments were provided by the government for the active participants and the leading spectators. The noble families from all parts of Siam were represented in the assemblage, and the display was the finest that the country has known for years.’

“This is what I find in the newspaper, and it seems to be a very good account. There are some things that it will be necessary for me to explain, so that you will get a good understanding of them. In the first place, I am told that the royal top-knot is taken off in a temple close to the artificial mountain on the first day of the ceremony. Doubtless they would cut it every day; but even in so fertile a country as Siam the hair does not grow fast enough to make a daily cutting feasible.

“After this ceremony the hair is allowed to grow in the shoe-brush style that I have described. Before that time it is in the shape of a twisted knot, about as large as a silver dollar, but when it takes its new form it covers the greater part of the top of the head.

“The Trailaht, or golden mountain, where the ceremony takes place, is not really constructed of gold, though it appears to be. It is made of wood and iron for a framework, and is then covered with sheets of lead that have been gilded. The machinery that moves the figures is concealed in the interior of the mountain, and the pathway that runs up the outside is made to look as much like nature as possible. There are valleys, and forests, and grottoes, and miniature rocks on the mountain, and the path is usually arranged so that it goes three times around between the bottom and the top. The Siamese pay great attention to the numbers ‘3’ and ‘9;’ they have pagodas and canopies of three stories, and others of nine; and in nearly all their religious ceremonies their movements are in threes and nines. The same is true of all countries where Buddhism is the religion; and, if you go as far off as Peking, you will find that the temples have triple terraces and triple roofs, while threes, or the multiples of three, may be found in the arrangement of the stones of the steps and pavements, and in the walls of the buildings.

“Perhaps you did not understand what was meant by the lakon girls that danced before the king as soon as he was seated. In this country there are girls who are trained to dance, like *geishas* in Japan, and just

as the girls of the ballet are trained in a theatre in Europe and America. Dancing is their profession, and they combine singing and acting with it; and some of the princes and great men have troops of these lakon girls to dance and sing for them. It is very common for them to invite their friends to an entertainment, and it generally consists of singing and dancing by these young ladies. Those around the palace are the prettiest that can be found in the kingdom, and they have wardrobes that cost a great deal of money, and are as grand as the wardrobes of any actress in Amer-



LAKON GIRLS.

ica. Very often in their acting they wear the most hideous masks that can be imagined, and when they are dressed up to resemble men or demons you can hardly believe that they are really pretty girls. I send you a picture of two of them, so that you may know what they look like.

“The native band of music is a curiosity, as it is quite unlike anything you ever saw. The king has a band after the European style, with a French leader, and with instruments imported from London or Paris.

It plays very well, and can render some of the popular pieces that we are familiar with just as well as any ordinary band in New York or London. When we were passing the palace the other day we heard them playing a selection from Faust, and another from the 'Grande Duchesse;' and one evening we heard the Siamesese national hymn, which is a very pretty composition, and worthy of a place among the national airs of Europe. But the native music is quite another thing.

"The performers sit down to their work instead of standing up, and they do not sit on chairs, but on the floor. The only band of the kind I have yet seen consisted of five performers, all women—one of them having a sort of guitar, another a violin, another a drum played with the fingers of one hand, another with a row of bamboo sticks that were struck with a small hammer, and the last of the five had a row of metal cups that were played like the bamboo sticks. There is a good deal of variety to the music in some ways, and very little in others; it seemed to be capable of considerable modulation in time and tune; and while at times it was loud and harsh, at others it became low and plaintive. Whether they have any regular tunes or not I am unable to say; they seemed to start off on a measure, and then repeat it over and over again for twenty or thirty minutes. Perhaps they would keep it up for a week or two if the weather was not too warm for continuing one's exertions for that length of time. They didn't seem to keep very closely together, and probably there was no occasion for them to do so, as the tune is of such a nature that each player can do pretty much what he likes.



A NATIVE BAND OF MUSIC.

"These lakon girls are the performers in the theatres of Bangkok, or rather at the private theatricals that are given at the houses of the nobles



A SIAMESE THEATRICAL PERFORMANCE.

and high officials. These affairs are generally given in a garden or courtyard, where carpets are spread under the trees that grow there. The dialogue is accompanied by music of the kind I have described, and sometimes they have drums like small barrels suspended on triangles or propped up on little frames. The performances are usually historical, but not always so, as the Siamese drama abounds in love-plays, which are taken from their literature. In the historic plays the costumes are frequently very hideous, though richly gilded and decorated; they have very little scenery or stage settings, and I think that a first-class theatre of New York or Paris would astonish them greatly. When not occupied on the stage, the performers stand or sit around the wings, and the audience is supposed not to see them.

"The voices of the singers are very sweet; and Doctor Bronson says that some of them only need careful training to make excellent performers. They are said to be much more musical than the Chinese or the Japanese, and much quicker to catch foreign music when it is taught to them.

"If you expect that women occupy in Siam the same position that

they do in America, you will be disappointed. Their condition has been greatly improved by the king since he ascended the throne, and he is evidently determined to overcome the prejudices of his people as rapidly as he can do so. He is the first ruler of Siam who has ever given his arm to escort a lady to the dinner-table after the European manner, and the first lady to receive this honor was the wife of an American admiral.

"The country has never been ruled by a woman, and women have never held a high place in the royal councils. Polygamy is customary in Siam; and the king has a harem, just as the Sultan of Turkey has one. He has one chief wife, or queen-consort, and is said to have about two hundred other wives; but nobody knows exactly how many there are—at least nobody outside the palace. Like all other monarchs with a harem, he has his favorites; and when one of his wives manages to attract his attention and secure his preference, she is very speedily the envy of the others. Probably human nature is the same the world over, and the history of royal and imperial harems everywhere is not greatly varied.

"Among the common people a man may have several wives if he chooses, and can afford the expense, but ordinarily he has only one. Where he has more than one, the first wife is the head of the household, and her authority is generally undisputed, though they sometimes have domestic quarrels, like people in other countries. Marriages are commonly arranged between youths of eighteen and girls of fourteen, and not infrequently at earlier ages. The ceremony consists of a feast such as the parties can afford; and though priests are not considered necessary, they are generally present to offer prayers. Among the poorer classes there is more approach to equality between husband and wife than with the rich; fashionable society does not permit the wife to eat with the husband, and she is regarded more as a servant than a companion; but the Siamese husbands are said to be much more kind to their wives than the Chinese, and to treat them with more respect.

"A great many wives, both among the nobles and the common people, are bought as slaves, and I am told that probably a quarter of the population is held in slavery. Men sell their wives, children, sisters, brothers, and even themselves; and in times past great numbers of slaves were held that had been captured in wars with neighboring countries. Slaves are not dear in Siam, compared with the prices that were paid in America before the emancipation of the negroes; a child may be bought for a small sum; and when a man wants to purchase a wife, he expects to get her for not more than eighty or a hundred dollars. Much of the slavery in Siam is the result of gambling; and it is not unusual for a man



to gamble away his family, his clothes, and then himself, in a single day or evening.

“While we are considering this subject of slavery, I will make an extract or two from the laws of Siam concerning the treatment of persons in bondage:

“If the inhabitants in embarrassed circumstances sell temporarily their children, wives, grandchildren, brothers, sisters, relatives, and slaves, males or females, to serve the purchaser, and the slaves be overtaken with a calamity, let the money-master inform the seller that he may come and take care of him at the money-master’s house. If the money-master take no care of him, and the slave dies, said money-master cannot claim any refund from the seller, because he abandoned the sick slave. His death must be the loss of the money-master, because he neglected a subject of the State.

“If persons pecuniarily or otherwise embarrassed sell temporarily their children, nephews, nieces, or grandchildren to a purchaser, to be used by him in lieu of interest, and the purchaser or master has business or trouble, and takes his slave to accompany him, and thieves or murderers cut, stab, and kill, or tigers, crocodiles, or other animals kill and devour the slave, the law declares, being the slave of the purchaser who took him with him, the purchaser is entitled to no refund from the seller, because the slave accompanied his master.’

“I have copied this from an English translation of the Siamese laws, and suppose it is correct. I am told that the slavery of Siam is not like what we had in the United States, as the slaves are of the same class and color as their owners, and there is not much difference between a poor free man and a slave. Both of them must work for their living; and I am told it sometimes happens that a man will deliberately sell himself, so as to have a master who will give him steady employment and feed him properly. The king has done a good deal towards improving the condition of slaves, and on every festival occasion those who have been a certain number of years in bondage are declared free. It is a common thing for men to pledge themselves and their families or relatives as security for money loaned or to pay interest, and when the debt is discharged they are free. The two sentences I have quoted from the Siamese laws relate to this kind of temporary slavery. It very often happens, when a man has thus pledged himself and family for a short time, and is confident that he will soon be free, his hopes are not realized, and he remains a slave for years and years—perhaps for his whole life. His relatives remain in bondage with him, and their happiness or misery depends very much upon whether they have a kind master or a cruel one.

"For persons who are not held as slaves, divorce is very easy in Siam. The laws are not very strict; and if they simply desert each other, there is generally an end of their marriage. I have been told of a funny sort of divorce among the lower classes, but cannot say if it be true. When a couple have determined to separate, they sit down on the floor in the middle of their house, and each lights a candle. They sit there in silence while the candles burn slowly down, and the property that they owned in common will all belong to the one whose candle lasts the longest. The one whose light goes out first is only entitled to the clothes he or she may have on at the time—which is not much anyway.

"What a lot of patent candles we should have if the same custom prevailed in America! Ingenious men would puzzle their brains to invent candles that would burn longer than any others; and we might expect to see any morning the advertisement of 'The Patent Inexhaustible Candle that will neither burn nor be blown out!' And somebody would devise a system of making a secret connection between the candle and a gas-pipe, so that the supply of combustible material would never be exhausted. The lawyers would not like this mode of settling matrimonial difficulties, and there is no probability that such a law will ever be made.

"To go into mourning, the people shave their heads; and when the king dies, the top-knots are removed from the heads of all his male subjects from one end of Siam to the other. The only exception to the rule is in the case of princes who are older than the king; and sometimes this exception gives rise to lively disputes concerning the princely age."

## CHAPTER XVI.

## CREMATION IN SIAM.—TRADE, TAXES, AND BIRDS.

ONE morning, while they were taking a row on the river for the purpose of visiting one of the canals, our friends observed a dense smoke rising from the vicinity of one of the temples. Fred was the first to see it, and wondered what it was for. As they neared the temple, they saw that the smoke proceeded from a burning pile, where several persons were standing around.

"It is a cremation," said Doctor Bronson; "we will stop and see it."

He directed the boatmen to land in front of the temple, and the three strangers walked to the spot where the fire was burning.

On a low mound of earth there was a fire of logs and smaller sticks of wood, and in the midst of the fire lay a body half consumed. It was evidently that of a small person, as the fire was not more than five feet long, and the body was completely wrapped in the flames. A dozen or more Buddhist priests were standing near the fire, and about as many other persons who did not appear to belong to the holy order. No ceremony was observed; and the Doctor remarked that they had probably arrived too late to witness the funeral-service. Not far off were the ashes that remained from similar cremations; and on one heap the fire was still smouldering.

They returned to the boat, and continued their journey; and as they did so the Doctor explained to the boys the peculiarities of the spectacle they had just witnessed.

"Cremation, or the destruction of a human body by fire," said he, "is customary in several countries of the Eastern World, and there has recently been an effort to make it popular in Europe and America. It prevails in Siam, but not altogether to the exclusion of the ordinary mode of burial in the earth. Cremation is considered the most honorable funeral, and it has a religious significance; it is a ceremony necessary to assist the soul in its passage to a higher state of transmigration, and to its final condition of perfect rest. Criminals who are executed by law are

not allowed to be burnt; and the same is the case with those dying of small-pox and certain other diseases.

"The ceremony of cremation is considered so important that, where it cannot be performed immediately after the death of the individual—from poverty or for other reasons—the body is first buried, and subsequently exhumed and burnt. When the person has any prominence or



SCENE ON A SMALL CANAL NEAR BANGKOK.

wealth, a few of the bones are preserved in the houses of the relatives, or they may be buried in the grounds near the temples. You saw some little monuments, like miniature pyramids, near the temple we just visited; did you not?"

"Yes," said Fred, "we saw them, and wondered what they were."



BURIAL-MOUNDS.

"Those were monuments where the ashes of the dead are preserved," was the reply. "You will find them near many of the temples."

Soon they came in sight of another temple, where a ceremony of some sort was just beginning. The Doctor told the boatmen to land there; and as soon as they were on shore they found that they had come upon another funeral-party, and evidently that of a person of distinction.

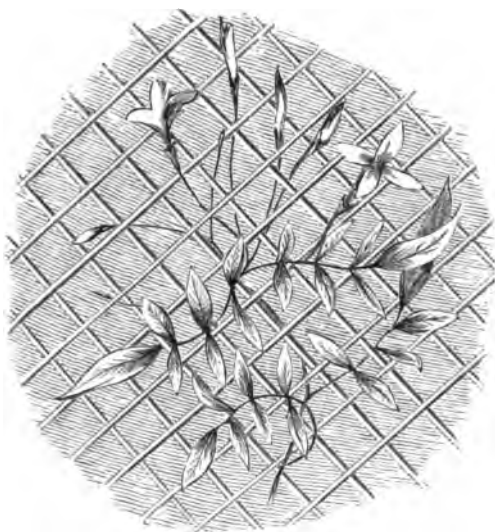
The body was in a coffin, which rested on a bier; and the coffin and bier together were not less than six feet high. The bier was covered with white cloth—white is the symbol of mourning in Siam—and the coffin itself was of a red color, and with a great deal of gold tinsel laid over it. Above the coffin was a canopy of white cloth, and it was thickly ornamented with bunches of jessamine flowers, freshly gathered.



URN CONTAINING ASHES.



Just as our friends approached the spot, a band, consisting of a gong, two drums, and a sort of flageolet, played a very discordant air as a pre-



JESSAMINE FLOWERS.

lude to the ceremony. Then a young priest read a service of prayers from slips of palm-leaf, and, while reading, he occupied a pulpit under a small shed in the court-yard of the temple. In front of the pulpit there was a platform occupied by several persons—the majority of them women. They were not at all attentive; and as the prayers were read in the Bali language, they were not likely to understand a word of them. The prayers occupied about thirty minutes.

There was quite a crowd of priests in the yard of the temple, but they paid no attention to the service until near its close. When the reading ended, they came forward and took hold of a strip of white cloth, six or seven yards long, that was attached to the head of the coffin. In this position they repeated some short prayers; and as they finished them the coffin was stripped of its coverings, and the cloth that came from it was distributed among the priests.

The body was then taken from the coffin and washed; then it was replaced, and carried three times around the bier, which proved to be a pile of fuel ready prepared for the burning. The sons and daughters, and other relatives of the dead man, were standing near the bier; and though they were quiet and respectful, they did not display the least emotion, with the exception of one young woman, who was said to be a favorite daughter. She wept loudly, and resisted the efforts of the others to comfort her.

When the third circuit around the pile was completed, the coffin was placed upon it. The fire was lighted by one of the priests, who uttered a short prayer as he touched the taper to the fuel. Meantime small wax-tapers had been distributed to all present, including our friends; and after the priest had kindled the flame, these tapers were placed upon the

pile by the persons who held them. Doctor Bronson and the boys did like the others; and the Doctor told his young companions that they would give offence if they refused to comply with the custom. The body was speedily consumed, and the ceremony was over.

Our friends again returned to their boat, and the conversation about cremation was resumed.

"The man whose funeral you have just attended," the Doctor continued, "was in good circumstances, and the ceremony was made to conform to his rank and importance. This is the rule in Siam, as it is with funerals in pretty nearly all parts of the world; and while the cremation of a poor man will be over in a few hours after his death, that of a king does not take place for a year."

"Why do they wait so long?" Frank asked.

"The real reason is," was the reply, "to enable the surviving relatives to make the proper preparations for the funeral, and it has been so long the custom that it is now fixed as a social and religious observance.

"Immediately after the death of a king, his body is embalmed and laid in state, with a great deal of ceremony, in the Maha Prasalit. It is the duty of his successor to arrange the funeral ceremonies; and he immediately notifies the governors of four of the northern provinces, where the finest timber of Siam is found, that each of them may send a stick to form one of the four corners of the P'hra Mane, or funeral pile. The sticks must be perfectly straight, and not less than two hundred feet long; at the same time twelve smaller sticks are called for from as many of the other provinces; and there is also a demand for timber for the construction of halls and other buildings needed for the ceremony.

"All the timber must be new, as it would not be proper for royalty to have any wood about its funeral pile that had been used before in any way. Several months are required



A BUDDHIST PRIEST.

to procure the timber and erect the pile and its various annexes, as they cover at least half an acre of ground. The whole of the work, outside and in, is painted in green and yellow, and a good deal of gold and silver leaf is spread on in various places, so that it appears to be of great



CHARACTERS IN THE PROCESSION.

richness. A large open dome is in the centre of the edifice, and it contains a small temple, with a platform on which the body is to be placed. Around the great building there are sheds and houses to accommodate the priests, who come from all parts of the kingdom to participate in the ceremonies; and outside of these sheds there are twelve small pagodas, that are decorated to represent the large temple. The whole mass of edifices for the funeral costs a great deal of money, and it is evidently an expensive thing in Siam for a king to die.

"On the appointed day there is a grand procession of soldiers and others dressed to represent various nationalities—not much unlike the procession at the ceremony of the royal hair-cutting. The entire royal family is out, and usually the procession takes not less than three hours to pass a given point. The festivals last ten days; various amusements are provided during the day-time in the shape of theatricals and other exhibitions, and in the evening they have fireworks, tumbling, rope-dancing, and the like. At certain intervals handfuls of money are thrown among the people, and a very lively scrambling is the result. Finally the body is burnt with a great deal of ceremony, the king being the first to apply the torch to the funeral pile of his predecessor.

"When the burning is completed, the ashes are thrown into the river, and the bones are placed in an urn and carried to one of the temples in the palace enclosure. Then the princes and governors who have come

from the various parts of the kingdom, are at liberty to return home; and the same is the case with the priests who have visited the capital on the same mission. There is probably no royal display in any part of Europe that can surpass the cremation of a king in Siam."

"Do the widows of the king go on the funeral pile to be burnt?" Frank asked. "Is the custom in Siam the same that it used to be in India?"

"Not at all," was the reply. "Siam has never had that horrid custom of the *suttee*, or widow-burning, that so long disgraced India. It is not allowed there now, and probably there has not been a single case of it in the last ten or twenty years. None of the religious rites of the Siamese have ever been accompanied by physical torture."

"Who pays for all the expense of these ceremonies?" said Fred.

"Nominally the king pays for them," the Doctor responded; "but in reality the money comes, as all government expenses come in every part of the world, from the people. The princes and governors, and other high dignitaries who attend a funeral or a hair-cutting, make presents that go in part for defraying the cost of the performances, and, of course, the money for these presents comes from their subjects."

"Then it is no more than right," Frank remarked, "that the people should be amused when they go to these affairs, whether they are funerals or anything else."

"But where does the king get all his money?" queried Fred. "That is, how does he raise his taxes, and how are they collected?"

"Taxes in Siam," the Doctor explained, "are of various kinds. They are direct and indirect, just as they are in other countries; and the object is the same—the production of a revenue."

"There is a tax on the sale of spirits, as I have already told you, and there is a tax on gambling. Both these taxes are farmed out, and the purchaser generally makes a good thing out of his venture. The purchasers are usually Chinese speculators, and they sub-let their privileges to smaller contractors for a round profit on their investments."

"There is a tax on fishing in the Menam River, and also in the other streams in which fish abound; the Buddhist religion forbids the destruction of animal life, but the requirement is rather considered as applying only to the priesthood, and the common people give little attention to it. But no one is allowed to fish within a certain distance of the palace, as all fish in that limit are held to be sacred, and under the protection of the king. On the canal that encloses the palace in the direction farthest from the river there are marks to indicate the limits; inside the line it

would be dangerous to the neck of a native to be caught fishing, while outside of it he may do so with impunity.

"Then there are taxes on shops and on various branches of trade, just as there are in the countries of Europe; and there are taxes on fruit-trees and land, and there are customs-duties, and other things. There is a poll-tax on the Chinese inhabitants of Siam, which is collected by the authorities with the utmost care; and any Chinese who neglects to pay it is liable to be compelled to work it out under the eye of a public overseer. Every boat that is used as a shop pays a tax, and so do all the shops through the country. Then there are certain articles of export that are considered the monopoly of the king, and as he has no competition in buying, and no opposition in selling, he has a good thing of it. The rules about trade are changing every year; and so, if you make a note of what I have told you, it is well to remember that what you have written for the day may not be good for all time."

"The consul told us about the imports of Siam," said one of the boys, "when we were going up the river to Ayuthia. Please tell us about the exports. He mentioned rice and sugar as articles that the Siamese send to other countries, but did not say what other things they had to sell."

"The exports of Siam," said the Doctor, in answer to the above remark, "comprise a good many things. Besides the articles mentioned, the country produces and sends to foreign ports a considerable amount of tin, which is dug from its mines; and it also exports small quantities of other metals. Then it produces pepper, tobacco, cardamons, ivory, and various dye-stuffs. It also exports the skins of the rhinoceros, buffalo, ox, elephant, tiger, leopard, bear, snake, and deer; and some of these articles go out in the form of leather. How great are the quantities of these things I am unable to say, as I have not studied the tables of imports and exports very closely."

Frank was curious to know how the people caught the snakes whose skins they exported. He thought a snake was a disagreeable thing to associate with, and not at all easy to capture.

The Doctor explained that the matter was by no means as difficult as he imagined. The snakes are fond of chickens, and they come around the houses of the people, particularly those that are built on rafts, in search of their favorite prey. When a native discovers any indications that a snake has been around his premises, he arranges a coop made of strong sticks of bamboo, and, after putting a chicken inside, he leaves an opening in one end large enough for the snake to enter. He goes into the coop and kills the chicken, which he swallows whole, after the manner



of snakes in general. He is so gorged that he cannot escape, and is found in his prison in the morning. Under these circumstances he is easily killed, and his skin is an ample compensation for the slaughtered fowl.

Fred had observed little cages on poles rising from the roofs of many of the houses, and naturally inquired their use.

"Those cages," said Doctor Bronson, "are intended as traps for birds. If you examine them closely you will perceive that they are double; one half is intended as a trap, and is left open for the wild bird to enter, while the other contains a captive bird who serves as a decoy."

Naturally the conversation turned upon the birds of Siam and their peculiarities.

"I cannot give you a very good account of the birds of Siam," said the genial Doctor, "for the reason that the ornithology of the country has not, as far as I am aware, been carefully and exhaustively studied. The



HAUNTS OF SEA-BIRDS ON THE COAST.

birds of prey include the white eagle and also the common brown eagle; and they have, as you have observed, the vulture, which is the same species that is found in India. The kite is very common; and there are two or three varieties of the hawk. As for crows, they have enough in Siam

to destroy all the corn in the States east of the Hudson River; and if the Siamese attempted to raise that article, they would doubtless have a hard time of it."

Frank thought they had seen crows enough around Bangkok to supply the wants of the whole of Massachusetts. Evidently the inhabitants did not molest them, or they would not be as bold as he had found them.



EDIBLE SWALLOWS' NESTS.

"Then, too," the Doctor continued, "they have the sparrow, the same as in Europe and America, and the ornithologists say that Siam is the most southerly limit of this bird. As you go south in Asia, you will not find the sparrow anywhere else except where he has been introduced by the European inhabitants.

"Some of the trade of Siam consists in shipping to China the edible portion of a bird's-nest, and this is the material from which the Chinese make their fa-

mous 'birds'-nest soup.' In Canton and Hong-kong it sells for its weight in silver, and sometimes is even dearer than that. It is found on the western coast of the Gulf of Siam, and also on the east coast of the Bay of Bengal; the bird makes his nest in caves among the rocks, and the work of collecting the nests is both difficult and dangerous."

"What kind of a bird is it?" Fred asked.

"It is a species of swallow," was the reply; "it is about as large as the common swallow with which you are familiar, and its movements through the air are much like those of the American bird; and in the same way that our swallows like to build in barns and chimneys, and other dark places, the Siamese one constructs his dwelling among the rocky caves along the coast."

"What is the peculiarity of the bird's-nest that the Chinese like so much?" one of the boys inquired.

"The peculiarity is in the material of which it is constructed," the Doctor answered. "The bird gathers a glutinous weed from the coral rocks, and carries it in its mouth and stomach to the cave where it lives. There the plastic substance is shaped into a nest about the size of a common teacup. There are three qualities, and they are prized accordingly: the first is when the nest is freshly made, and the material is snowy white; the second, when the bird has laid her eggs; and the third, when



SIAMESE WATER BIRDS.

she has hatched her brood and gone. The bird is known as the *lawit* in Java, and the *salangane* in the Philippine Islands, while its scientific name is *Hirundo esculenta*.

"Among the birds inhabiting the Siamese forests there is the common peacock, which is shot for the sake of its feathers; and there are several kinds of pigeons. Then they have the quail and the pheasant, the latter in several varieties; and they have the common cock, or barn-yard fowl,

running wild in great numbers. The chickens that are sold in the markets of Siam are these same wild birds domesticated, and those that we have in America are descended from Asiatic ancestors that went to Europe centuries and centuries ago. They have wild chickens in Siam, just as we have wild turkeys in our own country.

"They have in Siam a goodly number of wading birds, and not many swimmers. Ducks are bred by the Chinese residents, but not generally by the Siamese, and I am told that they do not exist in a wild state. The goose is rarely seen; but there are plenty of pelicans and kingfishers, and several birds of the crane and stork families."

"What was the bird we saw at the consul's house the day we called there?" queried Frank.

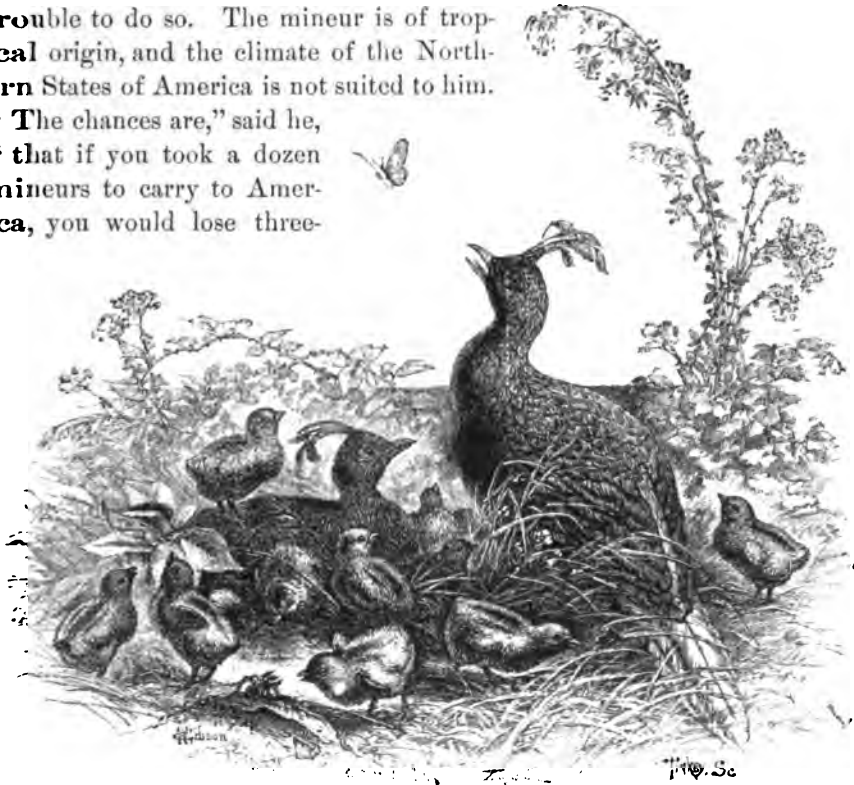
"You mean the one that kept up such an incessant talking?"

"Yes," Frank answered; "he rattled away in Siamese, and he called out 'Boy!' two or three times; and it sounded so much like a human voice that I thought, at first, it was some one calling a servant."

"That was a mineur, or minor," the Doctor explained; "and it is said to surpass the parrot in its ability to talk. He learns very easily, and is as great an imitator as the American mocking-bird. The one at the consulate can say a great many things in Siamese, but he does not yet know much English. A friend of mine had one of these birds that was the source of great amusement; he would whistle in exact imitation of his master, and he could sing certain bits of music without making a mistake. When my friend first obtained him, the bird could only speak the native language; but in a little while he picked up several phrases in English, and pronounced them perfectly.

"One thing he did was to call the servant, as he had heard his owner. As you have seen, the way of summoning servants is by shouting 'Boy!' and on hearing this word the servant comes. My friend's bird had caught up the word, and every little while he would shout it so as to deceive the servant, and bring him to his master. Naturally the servant was annoyed at being disturbed, and so my friend told him that when he wanted him he would call 'Boy! boy!' and he need not come when he heard the word only once. In three days the bird was doing the same thing, and deceiving the servant. Then it was arranged that my friend would strike on the table or clap his hands, as they do in Turkey and Syria. This was too much for the mineur; he found that he could not amuse himself as before. The one at the consulate is learning the same trick, and amusing himself by imitating what he hears spoken around him."

Frank wished he could take one of these birds home with him; but the Doctor said it would be too much trouble to do so. The mineur is of tropical origin, and the climate of the Northern States of America is not suited to him. "The chances are," said he, "that if you took a dozen mineurs to carry to America, you would lose three-



PHEASANT AND YOUNG.

fourths of them on the way, and the others would not live more than a few months after getting there."

As the Doctor closed his remark about the mineur, the boat touched the landing in front of the hotel, and their morning's excursion came to an end.



## CHAPTER XVII.

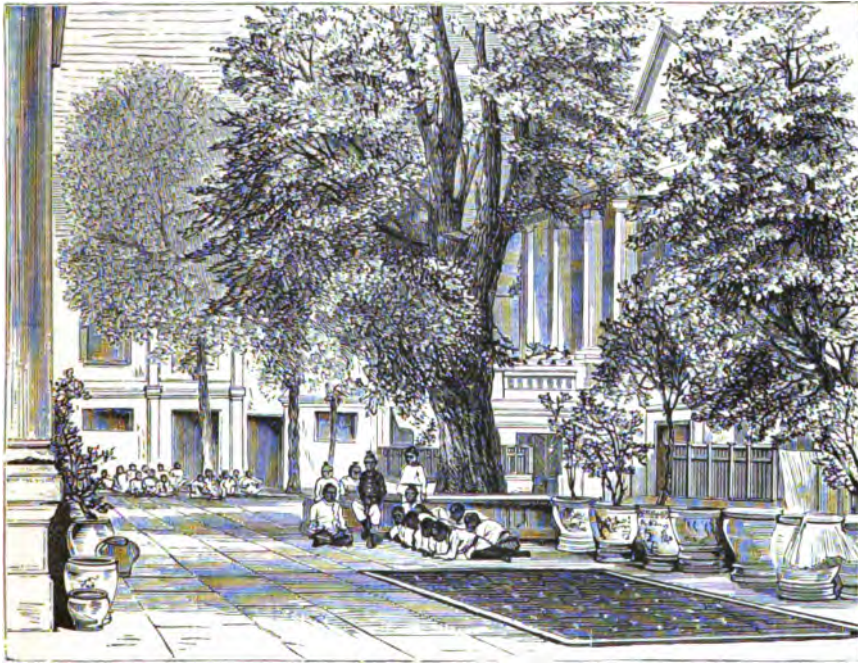
## PRESENTATION TO THE KING.—DINNER AT THE PALACE.

WHILE they were at lunch, and discussing the sights and scenes of the morning, a messenger arrived with a note from the consul. It was to the effect that the king would receive him, accompanied by Doctor Bronson, at three o'clock that afternoon. The consul added that he would call at the hotel with his boat about half-past two, and they would proceed thence together. The Doctor had no time to lose in making his toilet for the ceremony; he finished it, and was seated on the veranda of the hotel not more than two minutes before the consul arrived. At the latter's suggestion, the boys joined the party; and it was arranged that, while the two gentlemen were having their audience with the king, the youths could amuse themselves in the palace-grounds under the guidance of the consular secretary.

They had a slow journey up the river to the palace, as the tide was against them, and compelled the boat to hug close to the shore; but they were there a little before three o'clock, and had a short walk from the landing-place to the front of the palace. They were shown to a platform in the court-yard, and were received there by the interpreter and secretary of the king, who announced that his majesty would be ready for the audience in a few moments. The platform was under a wide-spreading tree, that furnished a most grateful shade; and there were many small trees and bushes growing in large pots that stood in irregular rows. Two or three groups of servants were crouched in the yard, which was paved with large blocks of stone, and a little way off a royal elephant was undergoing his daily exercise in charge of his keepers. Coffee was brought, and with it cigars and cigarettes; and a quarter of an hour passed away quite agreeably to all concerned. At the end of that time, a messenger came and said something to the secretary in Siamese; the secretary then turned to the gentlemen, and told them the king was waiting for them. He led the way towards a low gate-way, and the boys remained with the consular secretary.

They had a pleasant ramble in the palace-grounds, and saw the stables where the white elephants were kept, as well as the elephants themselves. The secretary told them the audience would occupy about half an hour, and they would have that time at their disposal before returning to the platform in the court-yard. In half an hour they came back, and waited for the Doctor and the consul. They were not there three minutes before the gentlemen returned, and were ready to go back to the hotel.

On their way homeward, the Doctor told the boys what he had seen and done, and the consul added here and there little bits of information



COURT-YARD OF THE ROYAL PALACE AT BANGKOK.

to the Doctor's story. The Doctor was so pleased with the visit, that he spent the evening writing an account of the affair; and it was not till a late hour that he finished it. He readily consented to allow the boys to copy it, so that it could form part of the narrative of their journey in Siam. Here it is:

"After leaving the platform, where we had rested to await the pleasure of the king, we soon came to a gate-way that was guarded by a double file of soldiers, who presented arms as we approached. The gate-way led us close to the apartments of the women, and I managed to have glimpses

of the dusky occupants of the place as we walked along. Some of them were pretty; but their mouths were so disfigured by betel-chewing that the effect was not agreeable. Our glance was only a hurried one, as we were speedily at the door of the palace.

"We mounted a stairway to the king's apartments; then we passed through a hall ornamented with busts and portraits of European sovereigns, living or dead, and then we entered a large saloon, where we found ourselves in the presence of the king.

"His majesty approached as we entered—exactly as a private gentleman might do in his own house when a visitor calls—and, after shaking hands with the consul, he paused for the latter to introduce me. As soon as I was introduced, he shook hands with me after the Occidental fashion, and invited us to seats near a table in the centre of the room. The sofa where he sat was at right angles to the position of our chairs, so that, by partially turning, he faced us both. At his left stood the interpreter, who translated the king's Siamese words into English, but rarely translated our own words into Siamese, as the king understands our language perfectly, and speaks it with very few mistakes. Ceremonious presentations are always conducted with the aid of an interpreter, and the king appears to understand only his own language; but when he wishes to have a free and confidential conversation with a foreign consul or other personage, he dismisses his interpreter, and talks away in English with perfect ease.

"His majesty's voice is full, clear, and resonant, and he pronounces every word with the utmost care. As he talks, his face brightens; he gesticulates gracefully, and to a sufficient extent to make his conversation quite un-Oriental in character. His complexion is the true Siamese bronze; his cheek-bones are high, and the outlines of his face are decidedly handsome. His thick black hair is parted gracefully in the middle, and not cropped after the Siamese style; he has a slender mustache, which evinces careful training, and gives promise of future greatness. He wore at the ceremonial the Siamese trousers, with white stockings, and he had on his feet shoes of patent-leather, if I observed them correctly. His upper garment was a sack of military cut, and made of white linen; it terminated with a sort of upright collar, and was closely buttoned. The only ornament I noticed upon it was a row of three stars on each side of the throat.

"Like all other kings, his majesty is well provided with uniforms, and every ceremonial has a dress peculiarly adapted to it. His military uniform, when he appears at the head of his troops, is quite European in style, but his court-dress for state ceremonials adheres strictly to the

Siamese model. It is richly embroidered and studded with jewels; the crown rises in the form of an elongated pyramid, with an aigrette of jewels, and the sandals are so thickly set with precious stones that there is very little of the foundation-work to be seen.

"His majesty asked how long I had been in Siam, and how I liked the country; wished to know if I had visited the temples of Bangkok, and what I thought of them; and made other inquiries touching my movements. When these questions had been answered, he spoke of the



CHULALONGKORN I., SUPREME KING OF SIAM.

visit of the United States ships of war several months before, and expressed the wish to see more of our ships and more of our countrymen in Siam. He asked when we would have American steamers running

between Bangkok and Hong-kong to connect with the Pacific Mail and Occidental and Oriental lines, and said he hoped for a rapid increase of commerce between Siam and the United States. Evidently he is sincerely desirous of intimate commercial relations with us, as he said there were many articles of American manufacture which they wished to be supplied with; while we, on the other hand, would doubtless be willing to purchase rice at a lower price than we were now paying.

"Tea and cigars were served while we were engaged on these topics, which occupied a period of ten or fifteen minutes. Then the conversation took a miscellaneous turn; and he dwelt upon the peculiarities of the different languages that are spoken in his dominions: it seems that his majesty is well versed in the various dialects and distinct languages, and he is like the Emperor of Austria, as he can converse with all his subjects in their own tongue. Then he talked with the consul about some matter that the latter had brought before him at a previous interview; and after that there was a convenient pause, in which we rose and made our adieux. The king followed us to the door of the room, and, before shaking hands in farewell, he invited the consul and myself to dine with him the following evening. Of course we accepted without a moment's hesitation, and then made our way out as we had entered. The whole affair from beginning to end was quite free from stiffness or severity, and proved the king to be, as he is represented, a most accomplished gentleman."

Sixty years ago a presentation to the King of Siam was a much more ceremonious affair than the one here recorded, and it required a great deal of study and rehearsal on the part of all concerned. Mr. Crawford, who came to Siam in 1822 at the head of an embassy from the Governor-general of India, gives the following account of his presentation:

"We left our dwelling at half-past eight in the morning for the palace. A twelve-oared barge, with the rowers dressed in scarlet uniforms, was furnished by the court for the conveyance of the gentlemen of the mission; another for our Indian attendants, about twenty in number; while the sepoys of the escort were conveyed in the ship's launch. It was made a particular request that our servants, especially the sepoys of the escort, should form part of the procession. About nine o'clock we landed under the walls of the palace, where we found an immense concourse of people waiting to view the spectacle. The accommodation for conveying us to the palace consisted of net hammocks suspended from poles, furnished with an embroidered carpet, and, according to the custom of the country, borne by two men only. The management of these vehicles was a matter of some difficulty, and our awkwardness became a subject of some amusement to the crowd. We passed through a street of Siamese military arranged in single file, and then came to a gate-way where we were compelled to leave our side-arms, as no person was permitted to come into the palace enclosure with arms about him. We were also compelled to dismount from our litters and leave our escort behind us.



"We passed through another street of soldiers, and finally came to a large hall, eighty or ninety feet long by forty broad. We were conducted inside, and carpets were spread for us to sit on while waiting to be summoned to the royal presence. We waited about twenty minutes, and were then taken to the hall of audience, where we were requested to take off our shoes and leave behind us our Indian attendants. As soon as we entered the gate we found a band of music of about one hundred persons drawn up to form a street for our reception. The instruments consisted of drums, gongs, brass flutes, and flageolets.

"Opposite the door of the hall there was an immense screen, which concealed the interior from view. We passed the screen to the right side, and, as had been agreed upon, taking off our hats, made a respectful bow in the European manner. Every foot of the great hall was so crowded with prostrate courtiers that it was difficult to move without treading upon some officer of state. Precedence is decided upon such occasions by relative vicinity to the throne; the princes being near the foot of it, the principal officers of government next to them, and thus in succession down to the lowest officer who is admitted. We sented ourselves a little in front of the screen, and made three obeisances to the throne in unison with the courtiers. This obeisance consisted in raising the joined hands three times to the head, and each time touching the forehead. To have completed the Siamese obeisance it would have been necessary to bend the body to the ground, and touch the earth with the forehead at each prostration.

"The hall of audience was a well proportioned and spacious saloon, about eighty feet long, perhaps half this in breadth, and about thirty feet high. Two rows, each of ten handsome wooden pillars, formed an avenue from the door to the throne, which was situated at the upper end of the hall. The walls and ceiling were painted a bright vermilion, the cornices of the former being gilded, and the latter thickly spangled with stars in rich gilding. The throne and its appendages occupied the whole of the upper end of the hall. The throne was gilded all over, and about fifteen feet high, and it had much the appearance of a handsome pulpit. A pair of curtains of gold tissue upon a yellow ground concealed the whole of the upper part of the room except the throne, and they were intended to be drawn over this also except when used. The king, when seated on his throne, had more the appearance of a statue than of a living being. The general appearance of the hall of audience, the prostrate attitude of the courtiers, the situation of the king, and the silence which prevailed, presented a very imposing spectacle, and reminded us much more of a temple crowded with votaries engaged in the performance of some solemn rite of religion than the audience-chamber of a temporal monarch.

"The words which his Siamese majesty condescended to address to us were delivered in a grave, measured, and oratorical manner. One of the first officers of state delivered them to a person of inferior rank, and this person to the interpreter who was behind us, and explained them in the Malay language, which we understood. After a few questions and answers relative to our mission, the king said,



PRIME-MINISTER OF SIAM.



THE KING OF SIAM IN HIS STATE ROBES.

"I am glad to see an envoy here from the Governor-general of India. Whatever you have to say, communicate with the minister of foreign affairs. What we chiefly want from you are fire-arms."

"His majesty had no sooner pronounced these words than we heard a loud stroke, as if given by a wand against a piece of wainscoting, and then the curtains on each side of the throne, moved by some invisible agency, closed upon it. This was followed by the same flourish of wind instruments as on our entrance, and the courtiers, falling on their faces to the ground, made six successive prostrations. We made three obeisances, sitting upright as agreed upon. The ceremony was over.

"During the audience a heavy shower had fallen, and it was still raining. His majesty took this opportunity of presenting each of us with a small umbrella, and sent a message to desire that we would view the curiosities of the palace at our leisure. When we reached the threshold of the audience-hall we perceived the court-yard and the roads extremely wet and dirty from the rain, and naturally demanded our shoes, which we had left at the last gate. This was a favor which could not be yielded; and we were told that the princes of the blood could not wear shoes within the sacred enclosure where we now were. It would have been impolitic to evince ill-humor or remonstrance, and therefore we feigned a cheerful compliance with this inconvenient usage, and proceeded to gratify our curiosity."

Doctor Bronson had no such ceremony to pass through as did Mr. Crawford in 1822; he was not required to remove his shoes at the gateway, and he did not pass along a hall full of kneeling courtiers. The



A YOUNGER BROTHER OF THE KING.

present king has ordained that persons of all ranks shall come before him erect, just as they would enter the presence of a king in Europe, and as far as possible he has made the usages of his court correspond to the European model.

Of the dinner to which the consul and Doctor Bronson were invited, the latter wrote as follows :

"The dinner was quite in the European style, and was prepared by a French cook who has been in his majesty's employ for several years. The party consisted of his majesty, six of his younger brothers, the king's private secretary, the consul, and myself. The conversation was general, and touched many topics; the king had many questions to ask about the United States, and particularly wished to know the difference between Siamese slavery of the present day and American slavery of the past. After dinner we sat on the balcony, listening to the music of the band, and breathing the soft evening air. During part of the dinner and all the rest of the evening the king threw off his reserve, dismissed his interpreter, and conversed freely in English, which he spoke easily, and with great correctness. It was half-past nine o'clock when we left the palace, and were escorted to our boat to return to the hotel."



## CHAPTER XVIII.

## THE WHITE ELEPHANT.—VISIT TO THE SECOND KING OF SIAM.

THE time that Doctor Bronson passed in the presence of the king was utilized by the boys in a visit to the stables of the famous white elephants of the royal palace of Bangkok.

When the Doctor was busy in the evening with his account of the presentation to the king, Frank occupied himself in putting on paper his experiences among the animals that are held in such reverence by the Siamese. Fred sat by his side and gave occasional hints about the story, and made sure that nothing they had seen was omitted.

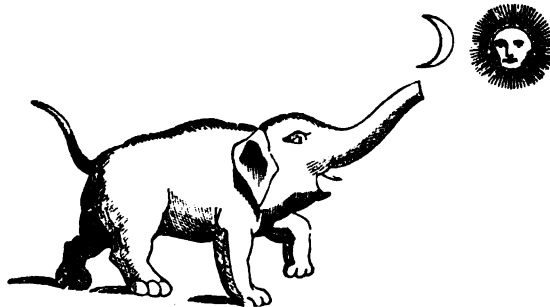
"Our friends," said he, "will want to know everything we can tell them about the white elephants."

"Of course they will," Frank replied; "they don't have white elephants in America—at any rate, our white elephants are not of the Siamese kind."

"I don't think I ever heard of one in our country," said Fred; "and if there ever was one there, it is news to me."

"Don't you remember," Frank responded, smiling, "that your uncle Charles was said to have bought a white elephant a year or two ago?"

"Yes, I remember it perfectly," was the reply. "It was not a white elephant that he bought, but only a large house. It was three times as big as he needed; and after losing a great deal of money in repairing it, and hiring a crowd of servants to keep it in order, he sold it for much less than he gave. Of course, I understand that when a man has bought



A WHITE ELEPHANT WORSHIPPING THE SUN AND MOON.

(From a Chinese Drawing.)



something he does not need, and which involves him in a ruinous expense, he is said to have bought a white elephant. I wonder where the expression came from."

Just then Doctor Bronson entered the room to look for something he needed, and the boys appealed the question to him. Both of them had heard the allusion to "buying a white elephant," and knew its meaning. What they now wished to find was where it originated.

The Doctor explained that it was said to be the custom in certain Eastern countries for the king to give a white elephant to any nobleman whom he wished to ruin. As the present came from the king, it could not be sold or given away: the expense of keeping the animal was enormous, as he required a great number of attendants, and consumed vast quantities of food. In a little while the nobleman would be a beggar, as his estate would be entirely consumed in maintaining the elephant; and so it came to be understood that when a man received such a present, it was a polite way of driving him into bankruptcy. "There is also a story," said the Doctor, "of a man who drew a white elephant in a lottery; he could not give his prize away, as nobody would accept it, and he could not kill him, as such an act was a crime of the highest character. It would not do to turn him loose, as he would then be responsible for all the damage caused by the elephant; and if he kept the beast it would soon eat him into poverty. Consequently, when a man has something in his possession difficult to get rid of and costly to keep, he is said to have drawn a white elephant."

The Doctor found what he wanted and retired, and the boys proceeded with their story. With Fred's assistance, Frank wrote as follows:

"The white elephant is not white by any means. He is only a sort of cream or flesh color; and anybody who expects him to rival the snow in the purity of his complexion will be disappointed. But, after all, he is not so dark as a good many men whom we call white, and so I suppose his name is quite proper. He is very scarce, and this is one reason why he is prized so highly.

"Siam is not the only country where the white elephant is regarded with special honor; the animal receives great attention, and is very much prized in Burmah and other Buddhist lands; and it is said that some of the wars between Burmah and Siam have arisen from disputes about the possession of white elephants. Money cannot buy them, and no king who possessed one would dare to sell it for any price, as his people would think he had defied the powers of Heaven, and would be sure to bring the severest calamities upon them. Sir John Bowring says that when he

came to Siam at the head of an embassy from the Queen of England in 1855, the king sent some presents for Her Majesty, and among them was a golden box locked with a golden key. It was said to be more precious than all the other presents; but it contained nothing beyond a few hairs from the tail of the white elephant.

"The Buddhists have great reverence for anything that is white; and when whiteness is combined with great rarity, and also with magnificence, it is easy to see why the white elephant is above all other animals. 'It is believed,' Sir John Bowring says, 'that Buddha, the divine emanation from the Deity, must necessarily, in his multitudinous metamorphoses or transmissions through all existences and through millions of æons, delight to abide for some time in that grand incarnation of purity which is represented by the white elephant. While the priests teach that there is no spot in the heavens above, nor in the earth below, or the waters under the earth, which is not visited in the peregrinations of the divinity, they hold that his tarrying may be longer in the white elephant than in any other abode, and that in the possession of the sacred creature they may possess the presence of Buddha himself.'

"The white elephant is considered of equal rank with the king, and is treated with all possible dignity; he has a stable to himself, and ten or twelve keepers to look after his wants. The first one we saw was standing on a platform which was being swept by a priest; and we were told that none but priests were allowed to serve the sacred animal. He was chained to a couple of posts, so that he could not step away from the platform; and the interpreter told us not to go near him, as he was not of a pleasant temper, and might hurt us. The keeper gave him a few bananas, which he appeared quite willing to take; the fact is, the elephant is very fond of bananas, and the wild ones in the forest will often run considerable risk to get them. After he had swallowed the bananas he reached for a truss of hay, but for some reason the keeper did not think proper to let him have it. He showed some temper, and the keeper brought him to a sense of his duty by pricking his foot with a sharp iron till drops of blood came from it. This seemed to us a funny way to treat a king, and we wondered how his majesty liked it.

"We saw two white elephants, and each had a stable to himself, or rather a palace. Their tusks were encircled with hoops or rings of pure gold, and there were golden or gilded canopies above them, and ornaments of great value in other parts of the stable. In one of the stables there was a white monkey, and the interpreter told us that the white monkey is an object of great veneration among the Siamese, and is kept

in the elephant stables to prevent the presence of evil spirits. The one we saw was a very quiet and dignified monkey of a perfectly pure white; he was above the ordinary size, and had a long tail, and they told us that he was caught in the forests on the upper waters of the Menam River.

"When a white elephant is caught, there is great rejoicing throughout Siam. The king and court go out to meet him as he is brought towards the capital, and there is a grand procession with banners and



WHITE MONKEY IN ELEPHANT STABLES.

music. Meantime a house has been prepared for him, and some of the members of the noble families of Siam are appointed to wait on him. He has everything he can possibly want except his liberty; and when he goes to the river to bathe he is escorted by other elephants, who are supposed to be highly honored by admission to his presence. But, in spite of all attentions, he sometimes takes sick and dies, and then the rejoicing is changed to mourning. The whole nation is wrapped in deep grief,

and the funeral ceremonies are of an elaborate character. Fortunately for the Siamese, the elephant is an animal of long life, and so they are not often called upon to mourn the loss of one of these sacred beasts.

"After we had seen the white elephants, we went to the stables of the common ones. There were a dozen or more of them in a shed that was quite open to the weather on all its sides, and they had only the ground to lie upon. They were chained up by the forefeet, and when we went to the stable they had just been fed. Each of them had a bundle of freshly-cut grass; and we were told that a healthy elephant consumes every day not less than seven or eight hundred pounds of this food. These elephants are kept for working about the palace-grounds; and their occupation at present is in hauling timber from the bank of the river to the places where it is wanted in the construction of a new wing to the king's residence.

"We were much interested in seeing the way the elephant eats.

"Everybody has seen the trunk of an elephant, either on the animal himself or in pictures. Did you ever know that there are more than forty thousand muscles in this wonderful structure, and that it is powerful enough to pull down a large tree, and at the same time sufficiently delicate to pick up a pin? That is what Cuvier says about it, and he is the best authority that we know of. Rennie, in his 'Natural History of the Elephant,' says the same thing; and when we consider the uses of the animal's trunk, and the many operations it will perform, the statement is not at all surprising. And when we saw the elephants at the royal palace taking their food, we could not help admiring the skill with which they twisted the wisps of grass and thrust them into their capacious mouths.



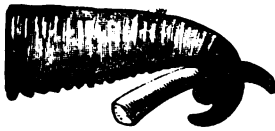
HOW AN ELEPHANT FEEDS.

"One of the beasts was very good-natured, and allowed us to examine the termination of his proboscis, as long as we did not touch it. As the elephant's existence depends upon his trunk he is very sensitive about it, and is constantly afraid of injuring it. They say that this is the reason why he always elevates it in the air when there is any danger, and that his great fear of the tiger arises from the fact that the tiger always attempts to disable the elephant by springing on his trunk.



"The trunk that we looked at had a projection that might be called a finger, and directly opposite there was a sort of thumb. The finger was exceedingly flexible, while the thumb was not; but they fitted to each other so well that they could hold on to any thing even if it was very small. Here is a picture of it.

"And here are some more pictures, showing how the elephant pulls up the grass when he is feeding in the open air, and also how he grasps it before he thrusts it into his mouth. Then you can see how he takes hold

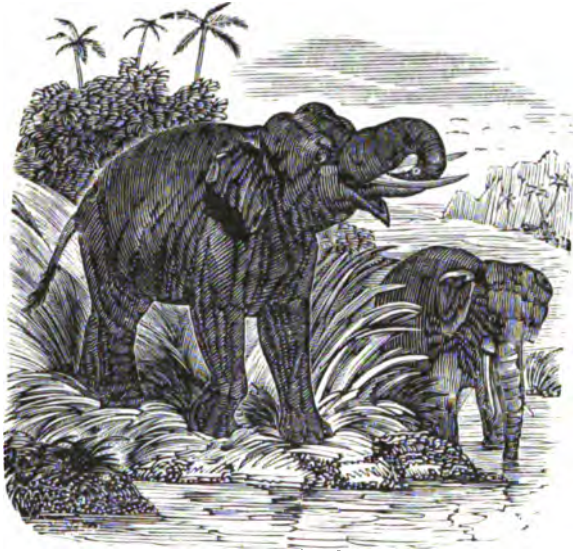


of a carrot, or any other root, and how he seizes a branch of a tree that requires him to exercise a part of his great strength. In the latter case he twines his trunk around the branch, and if he is pulling it down from the tree he raises himself on his hind legs, and lets his weight hang by his trunk. In this way he can bring down a good-sized branch without much trouble; and as he feeds on the leaves and small limbs in the forest where he lives, his power is very useful to him.

"When he has seized anything with his proboscis, his next effort is to carry it to his mouth. This he does by bending his trunk, just as a man bends his finger; and when he has it properly bent he thrusts the article



between his jaws, and has it all safe and secure. He drinks by drawing the trunk full of water, and then thrusting it to his mouth; it is sometimes thought that he draws water through the trunk directly into his stomach, but such is not the case. He breathes through the trunk, but he cannot take food or drink through it, as it only communicates with his lungs. Here is the way he supplies himself.



ELEPHANTS DRINKING.

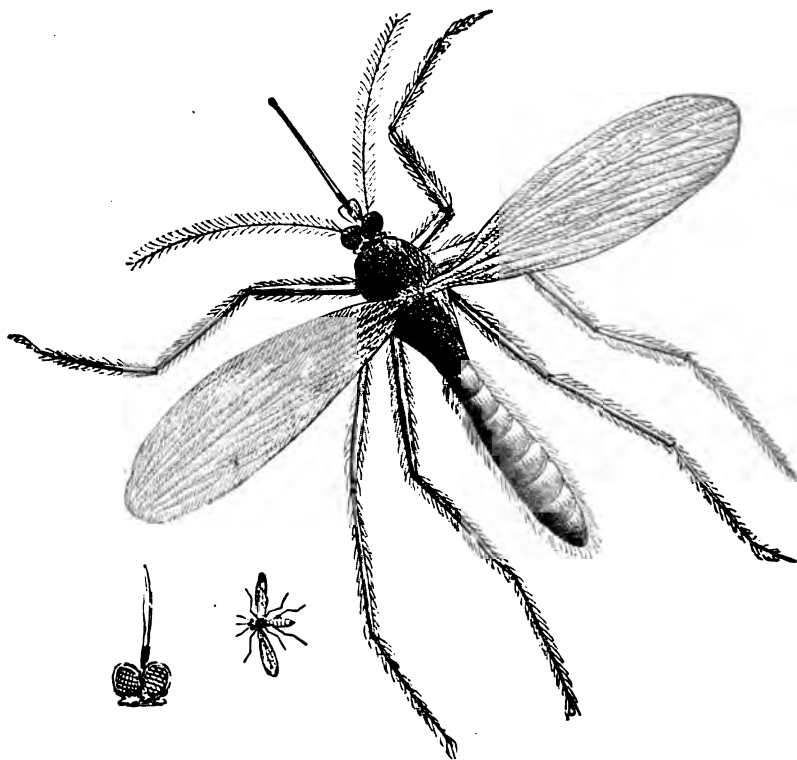
"There used to be a question among the boys at school, 'Why do white sheep eat more hay than black ones?' The answer was, 'Because there are more of them.' That may be all right for sheep; but if you apply the question to elephants, you are obliged to reverse it, as there are very few white elephants, and any number of black ones."

By the time the above account was finished it was after eleven o'clock. Labor was suspended, and the boys went to bed. In the morning they had a short time to spare before breakfast, and Fred thought he would write a description of his sleeping-room and its peculiarities, and send it along with the story of the visit to the palace. So he took pen and paper, and wrote as follows:

"The weather is so warm here that we don't need any bed-clothing, and consequently they don't give us any; we have hard beds with harder pillows, and they are much better than any soft beds and pillows could possibly be. A sheet to lie on is spread over the bed, and all the covering we need is the pajamas, or sleeping suits that everybody wears here. Mosquitoes are abundant, and of all sizes; and so they cover the beds with a netting of very fine mesh to keep out the smallest of these troublesome pests. The nets not only keep out the mosquitoes but they keep in the heat, and for this reason we suffer a great deal from the high temperature. I get up several times in the night, and go and sit on the bal-

cony, just to get a little cool; every time I wake I am in a profuse perspiration, and it is largely caused by the closeness of the air under the mosquito netting.

"When we first came here we were disturbed frequently by the *gecko*, a lizard that climbs around the walls and partitions of the houses, and goes wherever he pleases. He is five or six inches long, and not pretty



FRED'S TORMENTOR.

to look at, and he makes a noise like some one calling out 'Gecko!' It is from his call that he gets his name, and until we got used to it we were waked by it. It isn't pleasant to see these lizards climbing around your room; but everybody says they are perfectly harmless, and they eat up a great many insects. There is a smaller lizard that eats mosquitoes, or anything else he can manage, and it is very funny to see him at work. Frank and I watched one the other evening for half an hour, and saw him do a great deal of good. He is just the color of the boards where he clings, or very nearly so, and therefore he is not easily

seen. When a mosquito passed within half an inch of his nose he darted out his long flexible tongue with the rapidity of lightning, and caught his prize on the end of it. The mosquito disappeared like a flash, and then the lizard watched for another, and took him in the same way.

"When a mosquito or a fly lighted two or three inches away, the lizard would creep along like a cat, and hug close to the boards. He did it very slowly till he got within reach, and then out came the tongue as before, and he rarely missed his aim. One large fly was too much for him, and after getting him on the end of his tongue he had a sharp struggle to swallow him. The fly escaped, and after that the lizard was more cautious about the size of his game."

Breakfast was announced, and the story of the Siamese lizard was dropped for the present.

While they were at breakfast a messenger came from the consul to Doctor Bronson. He announced that the second king of Siam would receive them that afternoon, as they had been received the day before by the supreme king.

The boys had heard that Siam was ruled by two kings, and the Doctor took the opportunity to explain the relations between these rulers.

"The king at the grand palace, where we went yesterday," said Doctor Bronson, "is the first or supreme king of the country. The second king occupies a position that is difficult to understand clearly when we compare it with our own form of government. He is not like our Vice-president of the United States, as he does not inherit the throne on the death of the supreme king; nor does he resemble the ancient Mikado of Japan in being a spiritual ruler, while the first king is a temporal one. According to Sir John Bowring, his opinion and sanction are sought by the king in important matters, and his name is associated in treaties. He is supposed to have control of one-third of the revenues, and has a portion of the army under his command; in time of war he is expected to have direct control of the armies in the field, and to go with them in person, but this is not always the case. Occasionally the office of second king is abolished, and it seems to be largely in the power of the first king to do what he pleases concerning the rank and authority of his subordinate.

"The second king has a palace nearly as large as that of the first, and he has ministers corresponding to those that form the highest cabinet. The same respect is shown to him when he goes abroad as to the first king, and the latter is the only personage in the country to whom the second king must pay visits of ceremony. Siam is the only country in the world that has this arrangement for dividing the royal power, and

when we come to examine it closely it will be found that there is not a very large division, after all. Not long ago, as I am told, there was a quarrel between the first and second kings of Siam, which resulted in the second king seeking the protection of the English consul. Since that time the power of the second king has been less than it was before, and the breach between the two great heads of the kingdom of Siam has not been entirely healed."

At the appointed time the consul called for the Doctor, and the two gentlemen proceeded on their excursion, leaving the boys at the hotel. The journey to the palace was not made in a boat, as on the day before, but in a carriage, for the reason that going in a boat would necessitate a long walk from the landing to the gates of the royal residence. On his return the Doctor gave the following account of his visit:

"We drove through a narrow gate-way where some soldiers were on guard, and soon found ourselves in an open court-yard of the palace. Here we left the carriage, and entered a large anteroom at the head of a flight of stairs, where we waited while a messenger went to inform the king of our arrival. He came back shortly, accompanied by a gentleman who spoke English and Siamese with equal fluency, as he is the son of an American missionary, and was born in Siam. Under his guidance we went to the reception-hall, which was in a large building just off the court-yard. It was entered directly from the open air, and not by passing through a series of halls, as in the palace of the first king. His majesty rose as we entered, and came forward a few steps to meet us; he first shook hands with the consul, and then with me after the consul had introduced me, and the interpreter had translated his remarks. .

"The king asked us to be seated, and gave us the example by taking a chair for himself, and indicating the ones we were to occupy. He is a man of about fifty-five or sixty years old, and has a pleasant and intelligent face; he speaks English with considerable fluency, and has read a great deal about England and America. He is a great admirer of America, and is proud of the name of George Washington, which he bears."

"Are we to understand," Frank asked, "that the second king of Siam is named George Washington?"

"Hardly as much as that," was the Doctor's reply; "he was known among the foreign residents of Bangkok by the name of Prince George before he was proclaimed second king. He has at least half a dozen Siamese titles, and places the name of 'George Washington' before them. He assumed it himself, as I am informed, with the consent of the old King of Siam, because he admired the character of the man whom we



THE SECOND KING OF SIAM, IN STATE ROBES.



hold in such great reverence in America. He has been, and continues to be, a pretty close student of science, politics, and other matters, and is a man of more than ordinary intelligence.

"Soon after we were seated, coffee and cigars were brought, and the king offered us some of the latter from his own box of massive gold. Conversation began immediately; the questions and answers being rather slow, as they were made through the interpreter. The king asked when I left America, and what I thought of Siam; and when I spoke in praise of his country he appeared greatly pleased. Then we talked about the scenery of the tropics in comparison with that of the temperate zone; and the king said he was sorry America was so far off, as it would give him great pleasure to visit it. Then we talked about the fruits and flowers of Siam, the many varieties of the palm-tree, and the great uses of the palm and bamboo to mankind. Then the king asked about some of the productions of America; and after that there came a pause, which gave us an opportunity to rise and make our adieux. The king shook hands with us at parting, and hoped I would like my stay in Siam so well that I would come here again. We found our carriage, and drove home again; but, before leaving the palace, we went to see an elephant which belongs to the second king, and is said to be over a hundred years old. It has been a long time in captivity, and is very large and powerful, and its temper is anything but amiable."

Fred asked if the king wore his state-dress as it was represented in the pictures he had seen of his majesty.

The Doctor answered that the king was plainly dressed, and the only indications of rank about his garments were some stars embroidered on the collar of his coat. The coat was short, and rather in form like a jacket; it hung loosely, and by no means concealed a vest of white linen that joined with trousers of Siamese pattern, to complete the clothing of royalty. On his feet he wore a pair of embroidered shoes that were cut low enough for slippers, and could be easily thrown off without the aid of a boot-jack. His attendants were in Siamese garb, and the general surroundings of the place were more Oriental in their character than those of the palace of the supreme king.

Frank and Fred listened with great interest to what the Doctor had to say of his visit to the second king of Siam. Through fear of forgetting some portion of it, they proceeded to put it upon paper at once; and, as the afternoon was far gone when they began, they had sufficient occupation for the rest of the day.

## CHAPTER XIX.

## LEAVING SIAM.—LIFE UNDER THE OCEAN WAVE.

THE time came for leaving Siam. Our friends had enjoyed their visit to the Land of the White Elephant, and had seen many things that were full of interest; they wished to remain longer, but they remembered there were other countries to be seen, and other people whose manners and customs they wished to learn from personal observation. So they prepared to continue their journey.

Their next place of destination was Singapore. Between that city and Bangkok there is a service of steamers each way about once a week; it is somewhat irregular, as the movements of the ships depend more or less upon the amount of freight offering and the facility of obtaining cargoes. The steamers are under the Siamese flag; some of them belong to the government, while the others are the property of Chinese or Siamese merchants established at Bangkok. All of them are small, to make sure of passing the bar at the mouth of the Menam, and their passenger accommodations are rather limited.



THE DOCTOR GETTING READY.

The distance from Bangkok to Singapore is about eight hundred miles; and, as the ships are not built for speed, the voyage usually takes from four to five days. Our friends engaged passage on the *Bang Yong Seng*, and were told to be on board by seven o'clock in the morning of the day fixed for departure. The steamer was at her dock about a mile above the hotel, and consequently Doctor Bronson and the boys proposed to leave the hotel soon after six o'clock, in order to be in season. When they suggested their plan to Captain Salje, the proprietor of the establish-

ment, the latter laughed, and said he would have breakfast ready for them at half-past six, and then they would have an abundance of time.

"How can that be?" the Doctor asked.

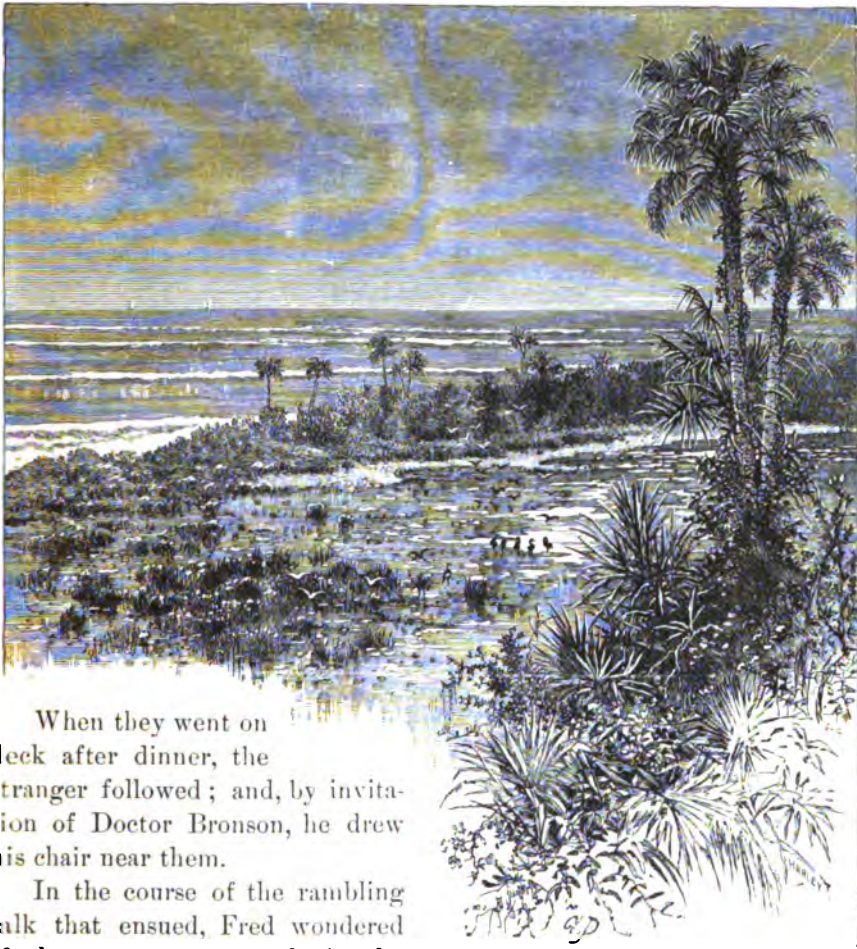
"Very easy to explain," the captain responded. "The river is so narrow that the steamer cannot turn around where she is. She backs down below here, and does it very slowly, and you need not go to the dock at all. You can have your baggage ready, and when we see her coming you can pull out with the boat and drop along-side. The gangway-ladder will be down, and you can get on board and have your baggage handed up without the least trouble."

This plan was quite to the taste of the party of travellers, and they adopted it at once. It was carried out to perfection; and the boys pronounced it much better than being obliged to breakfast at a disagreeably early hour, and then pulling up the stream. The consul came to see them off; and as the steamer passed the consulate, the flag of their country was dipped in farewell honor to Doctor Bronson and his young companions. The steamer turned a little below the consulate, and headed her prow for the sea; and she steamed steadily onward, till at length she left the Menam behind her and entered the waters of the Gulf of Siam.

The boys sat on the deck of the steamer, and watched the low coast as it slowly receded from view. Flocks of birds filled the air, or settled on the marshy shores, where the scattered palm-trees waved their tufted heads. There was a faint ripple of surf breaking on the beach, or forming in long lines where the waters were shallow. The sky was clear, and the sun filled the atmosphere with a flood of light; while it made the shelter of the awning indispensable to the comfort of the young travellers.

Although the steamer was of light draught, she stirred the mud from the bottom as she crossed the bar at the mouth of the Menam; she left a long trail of discolored water behind her, but it disappeared as she steamed onward and left the shores of Siam fading in the distance. While the boys were busy with their contemplation of the scene, the Chinese steward of the steamer came to tell them dinner was ready. They went below, and were soon seated at the cabin table.

The passengers were not numerous. Besides the Doctor and his young friends, there were only two others in the cabin, and it did not take long for them to form an acquaintance. One of the twain was a German merchant living at Bangkok, and the other was a personage who reminded the boys a little of their old friend, "the Mystery." He was affable, and inclined to free conversation; and though they could not at first make him out, they found themselves attracted towards him.



When they went on deck after dinner, the stranger followed; and, by invitation of Doctor Bronson, he drew his chair near them.

In the course of the rambling talk that ensued, Fred wondered if there were any pearls in the Gulf of Siam. Frank quickly responded that it was Ceylon, and not Siam, where the most of the pearls of commerce were to be found.

The remark about pearls led to a discussion of the mode of gathering them. Very naturally something was said about the methods of going beneath the waves of the sea.

The stranger joined in the conversation, and it was not long before he developed much more than a casual knowledge of the business under consideration.

"I may as well introduce myself," he remarked, "and then we will be able to talk freely. I am known as Captain Johnson, and have been

COAST OF SIAM, NEAR THE MOUTH OF THE RIVER.

around the Eastern seas for the past twenty years. I am an Englishman by birth, and have been captain of a ship trading between London and Singapore; but at present I am a wrecker."

Doctor Bronson replied to this introduction by handing his own card to Captain Johnson, and introducing the two youths by name.

The boys showed by the expression of their faces that they were not altogether familiar with the peculiarities of the stranger's occupation; evidently he perceived it, for he proceeded to explain what a wrecker was.

"Properly speaking," said he, "a wrecker is a man who lives on a dangerous coast, and makes a living by assisting wrecked vessels, and saving what can be saved from their cargoes. My occupation is something like his, but not exactly; he works above the waters, while I go below them."

"Go below the water to save a ship!" said Fred, in astonishment. "How can you save a ship in that way?"

The question led to an explanation that lasted through the entire afternoon and evening. We will endeavor to give the substance of it, as nearly as possible, in the words of Captain Johnson.

"Life beneath the ocean wave," said he, after he was comfortably balanced in his chair, "has many features of interest. In my profession of wrecking I have seen much that does not ordinarily happen to a man; I am sorry I cannot remember all that has come under my observation, but perhaps it is just as well, as I might remember too much, and so weary you."

Frank assured him it would take a longer period than they were likely to pass together on the ship for him to become weary of stories of the sea. Fred echoed the remark, and thus the captain was encouraged to proceed.

"Thanks to men of science and ingenuity," the captain continued,



WATER-FOWL OF SIAM.



"we have made great progress in going beneath the water in the last twenty-five years. Formerly a man could only stay below as long as he could hold his breath, and of course this prevented his descending to any great depth. With the diving apparatus now in use he can go far below the surface, and remain there for hours."

The boys opened their eyes very wide at this assertion, but they did not interrupt the story by saying what they thought.

"The fisher for pearls in the primitive way has no apparatus beyond a stone attached to a cord, a basket slung around his neck to hold the pearl-oysters, and a knife to detach them from the bottom, and also to defend himself from sharks. At the moment of diving he fills his lungs with air and grasps the cord, and as he does so the stone is thrown from the side of the boat by his assistant. The weight of the stone carries him down; he gathers as many oysters as he can while the air in his lungs holds out, and then he shakes the cord as a signal to be drawn up. Sharks abound in the regions where the pearl is found, and not infrequently they seize the poor diver as he rises to the surface. His only

mode of escape is by rapid movement; and you can readily see that he is at a great disadvantage, as he is out of his proper element, and in that of the shark.

"The diving-bell was the first invention to improve on the old process; it consisted of a wide-mouthed bell large enough to contain one or two men, who stood or were seated inside. If you put a tumbler into the water with the mouth downwards,



A WRECK AMONG THE BREAKERS.



PEARL FISHER ATTACKED BY A SHARK.

you will perceive, as you press below the surface, that the air within keeps the water from rising."

The boys nodded assent to the captain's remark.

"In this way the air remains in the bell, and until it becomes foul the divers suffer no particular inconvenience. But as soon as it has been breathed so as to cause a sense of suffocation they must be drawn up, or they will die.



NESTS OF THE WATER-SPIDER.

"Then somebody arranged an air-pump so as to connect with the bell, and by constantly working this pump the foul air was expelled, and new air came in to supply its place. By this process the men could remain some time below; but they could not leave the bell, and their operations were confined to the space covered by its mouth. It is a curious fact that the first diving-bell was invented by a spider, and not by a man."

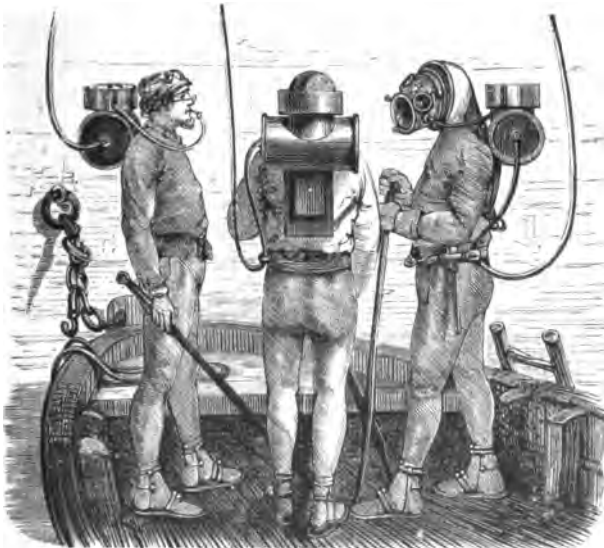
"Invented by a spider!" the two boys exclaimed in a breath.

"Yes, invented by a spider," the captain continued.

"Why, how can that be?" Frank asked.

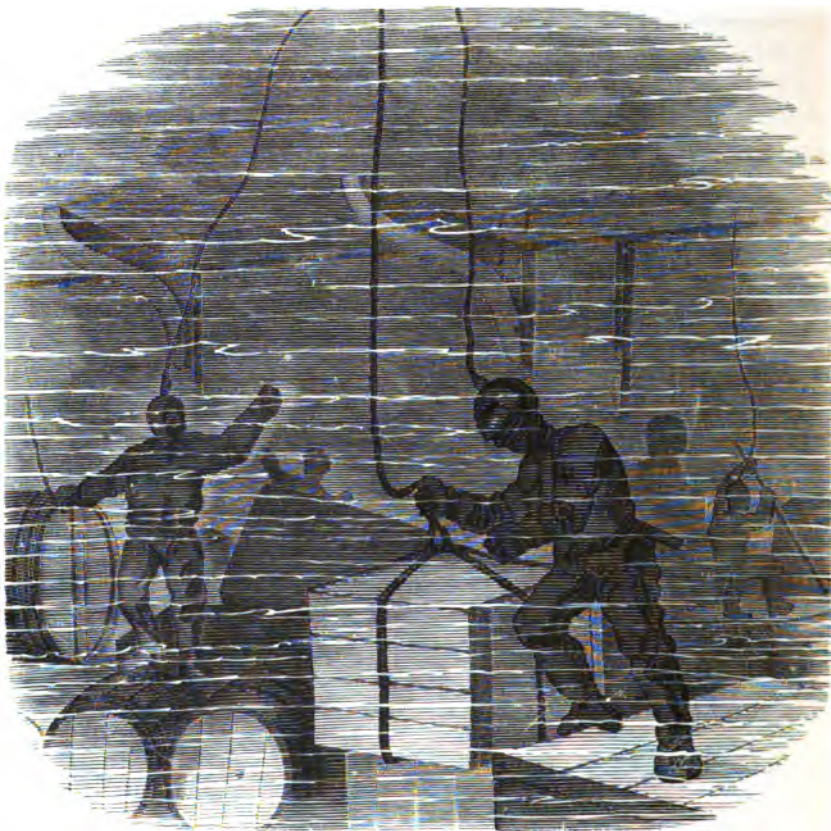
"The water-spider builds a house of silk in the shape of a bell, and anchors it to the roots of the grasses that grow several feet under the water. Having finished his dwelling, he proceeds to stock it with air. For this purpose he comes to the surface, takes a bubble of air under his abdomen and carries it to the house, where he releases it, and allows it to rise into the cavity where he wants it. He repeats the operation till he has filled it with air, and then he has a satisfactory home for his family.

"Now the diving-bell is on this principle, with the advantage of not being stationary, and also with the greater advantage that the air can be renewed when it becomes foul. But the modern armor dispenses with the bell; the head of the diver is covered with an air-tight helmet with a plate of glass in front, so that the man can see what is about him, and the air is kept fresh by means of an air-pump and a flexible tube of india-rubber. There are several forms of this apparatus, some of them having a metallic knapsack, where the air is received before it goes to the helmet, while others dispense with the knapsack, and carry the air directly to the head of the man who is to breathe it. Sometimes, where the depth is slight, and he is not to remain long below, the diver does not use the helmet at all, but simply holds a tube in his mouth, through which a stream of air is driven to him."



DIVERS IN THEIR ARMOR.





DIVERS AT WORK.

Frank asked how the man wearing this armor managed to sink in the water, and retain his perpendicular position. According to his experience, there was a tendency of the feet to fly upwards as soon as the body was in the water, especially where it was salt instead of fresh.

"That is provided for," said Captain Johnson, "by giving the diver a pair of shoes with soles of lead. They are so heavy that when he is out of water he can lift his feet with difficulty; but when he goes below, the specific gravity of the water makes them much lighter. He can then step around, and at the same time his equilibrium is maintained."

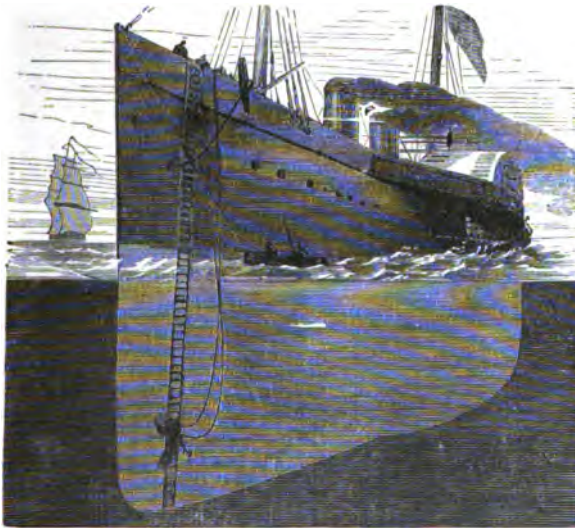
"How long can a man stay under water with the apparatus you have described?" Fred asked.

"From one to two hours," was the reply; "according to the depth and condition of the water. If it is very cold, he will be chilled in a little while, and must come up to get warm again; and if he has to hold

himself against a strong current he will find his strength leaving him, and must make a signal to be drawn to the surface. I have been two hours under, at a depth of eighty feet, and felt no inconvenience; but when I came up I was not able to go down again for several hours."

"Can you go down in the open sea in this way," said Fred, "or must you always be where the water is quiet?"

"As to that," the captain responded, "it is impossible to answer in a single word. The most of our operations are in rivers and harbors, or in bays more or less shallow. Sometimes at sea it is necessary to examine the bottom of a ship, in order to stop a leak or repair some other damage. In such a case the ship is stopped, and a ladder is lowered near the place to be examined; a man goes down in his submarine armor without difficulty, and, though the water must be reasonably smooth to allow him to do so safely, I have known it to be done when there was quite a heavy sea on. The general rule is, that, unless the sea is smooth enough to allow a boat to lie along-side for the purpose of assisting the diver, it is not



DIVING OVER THE SIDE OF A STEAMER.

wise to send him below. Divers are their own judges of such matters, and will naturally refuse to descend if the risk is too great.

"Once in awhile we have cases of diving in the open ocean. Do you remember the loss of the steamship *Japan*, on the coast of China, in December, 1874?"



The boys said they had heard about it while they were in China, but could not remember anything particular about the affair.

"Well," continued the captain, "the *Japan* was burnt at sea, one hundred and thirty-five miles north-east of Hong-kong, and fifty miles from Swatow. The nearest land was Breaker Point, twenty miles away, and the water where the wreck sunk was twenty-three fathoms, or one hundred and thirty-eight feet deep. The *Japan* had about three hundred and fifty thousand dollars in silver on board, and the underwriters at Hong-kong who had insured it determined to make an effort for its recovery. For this purpose they engaged Captain Roberts, who was a well-known wrecker on the coast of China, and set him at work.

"A schooner and a small steamer were bought, and in January, 1875, Captain Roberts began looking for the wreck. He dragged the bed of the ocean for four or five weeks before he found anything; but at last he was successful, and discovered one of the paddle-wheels of the ship. It was some time later before he found the wreck of the ship, as it proved to have drifted eleven miles south-west of the spot where the wheel had dropped off."

"How could that be?" Frank exclaimed.

"It was because the wind was blowing very strong at the time from the north-east, and after the wheel fell off the ship was driven on before the gale till it had burnt low enough to sink. It took from March to July to find the wreck after the wheel was discovered, and then they immediately began operations for getting at the sunken treasure.

"The south-west monsoon blows from March till September, and it was only during this monsoon that the divers could work. On the 12th of that month the monsoon ceased, and Captain Roberts had not been able to get at the treasure, which was contained in an iron tank in the hold of the ship. He thought the whole enterprise would end there, and the *Japan* and her three hundred and fifty thousand dollars would remain undisturbed at the bottom of the sea. It was not likely that the underwriters would incur the expense of another expedition the following year, when the chances of recovering anything were so doubtful.

"The diver went down for the last time; and while he was below the crew were making preparations to hoist anchor, and be off for Hong-kong as soon as he rose.

"Suddenly he signalled to be pulled up, and they hoisted away. As he rose he held a lump of something in his hand, and passed it to Captain Roberts, who was standing on the deck of the schooner.

"It was a lump that looked like coal; but it was heavier than coal

by a great deal. Examination showed that it was a mass of twenty-four silver dollars, all melted and charred together, but still distinguishable as dollars.

"The question was settled. The wreckers retired to Hong-kong during the six months that the north-east monsoon blows, and in the following March they returned to their work. In 1876 they recovered about



CORAL-FISHING IN THE MEDITERRANEAN.

twenty-five thousand dollars; and in the two following years the whole of the treasure was secured. It was one of the finest wrecking operations ever known. And here is one of the dollars that lay for three years at the bottom of the Pacific Ocean."

As he spoke, Captain Johnson drew from his pocket an American trade-dollar bearing the date 1874. It was quite black from the effect

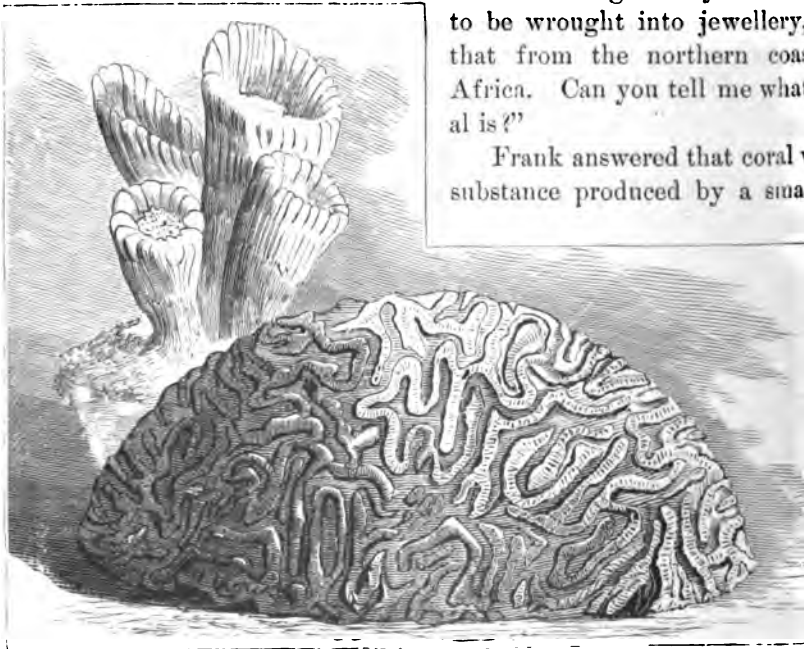
of its long immersion in the ocean, but otherwise was as perfect as when it came from the mint at San Francisco. The boys were greatly interested in this curious coin, and so was Doctor Bronson. It was passed from one to the other of the trio, and the boys were for some minutes so thoroughly engrossed in examining it that they had no attention to bestow on anything else.

Frank wished to know whether there was any coral or other curious products of the sea where the wreck of the *Japan* was lying at the bottom of the ocean.

Captain Johnson told him there was nothing of the kind in that particular spot, but that a great deal of coral was to be found in the tropical waters of the Far East. "The best coral," said he, "comes from the Mediterranean; other parts of the world produce it in much larger quantities, but it is not generally fine enough to be wrought into jewellery, like that from the northern coast of Africa. Can you tell me what coral is?"



THE CORAL-WORM.



CUP-CORAL AND BRAIN-CORAL.

Frank answered that coral was a substance produced by a small in-

sect which works under the water, and produces a substance somewhat resembling stone. There are many varieties of it, and the work of the coral insect is usually in the form of branches—like a small tree without leaves. There are also formations known as cup-coral and brain-coral, on account of their shape and general appearance.

Fred said he had read somewhere that in the Pacific Ocean there were islands of solid coral; and there were also reefs surrounding islands like great walls. Some of these walls were hundreds of miles in extent, and kept ships from approaching the land.

"Can you tell me what an atoll is?" said the captain, with a smile.

The boys had both heard of an atoll, but at the moment they were unable to describe it. So the captain came to their relief, and explained it to them.

"An atoll," said he, "is a circular island or reef, with an opening on one side, with water that is usually deep enough for the largest ships to enter. The strip of land or coral is a few hundred yards wide, and often covered with palm and other trees; and there are sometimes hundreds of atolls in a single group. They vary in size from half a mile to forty or fifty miles in diameter, and the lake or lagoon inside is from one to four hundred feet in depth. Ships may sail around in these lagoons, and they often abound in fish of many varieties. The contrast between the rough ocean outside and the calm lake within is very impressive, and will never be forgotten by one who has observed it."



AN ATOLL IN THE PACIFIC OCEAN.

## CHAPTER XX.

## LIGHT UNDER WATER.—PEARL-FISHING AND TURTLE-HUNTING.

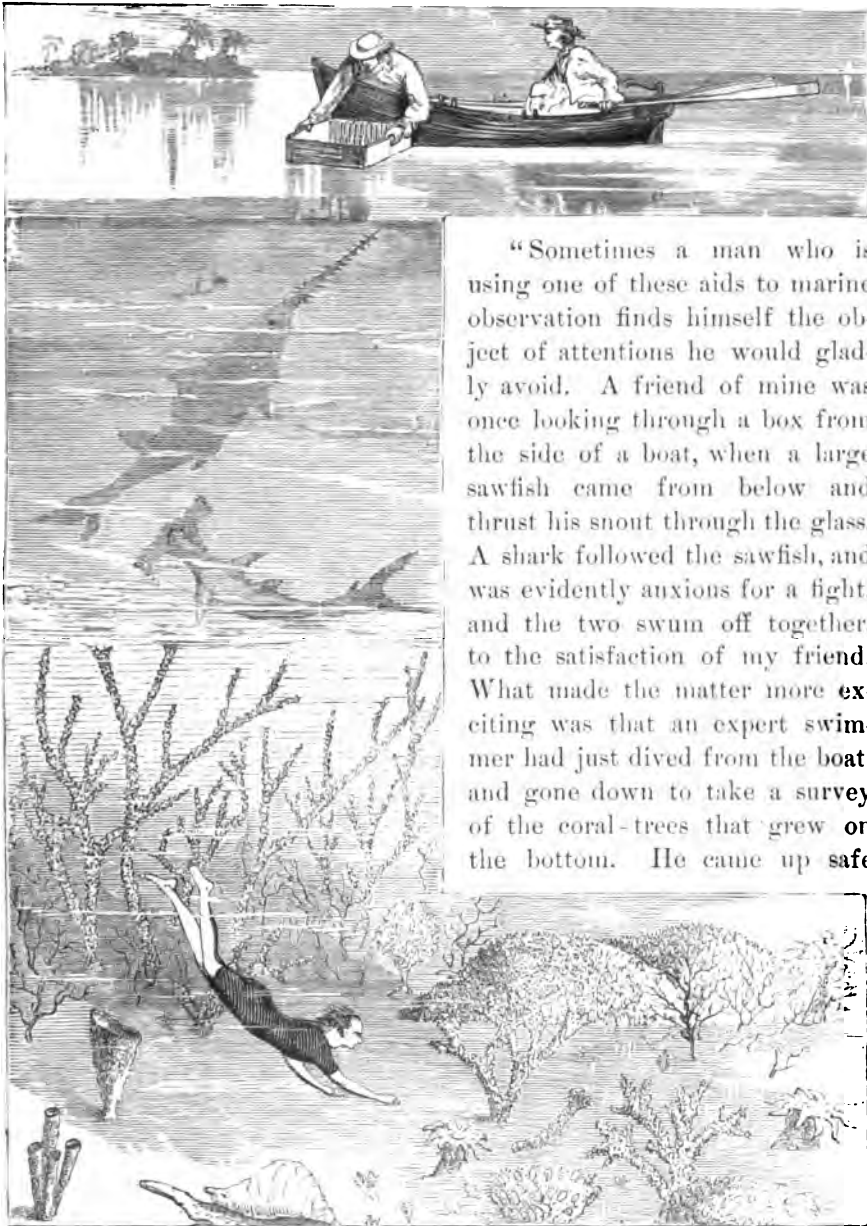
FRANK was curious to know how it was possible to see under water. He thought it would be dark at great depths, and, if so, it would be impossible to do anything there on account of the darkness. Lamps could not be made to burn under water, and until this was done the explorers of the sea could not make much progress.

Captain Johnson replied that Frank's theory was correct. As the diver goes down the light becomes more and more dim, but the dimness or the absence of it depends upon the clearness of the water where he is at work. If the water is clear and the sunlight good, there is no trouble about seeing at any depth to which a diver may safely descend. In a stream like the Mississippi or the Missouri river it will be darker at ten feet deep than in the Mediterranean at a hundred.

"But science has come to our aid," he continued, "by giving us the electric light. There is one form of it that can burn in a vacuum—in fact, it needs a vacuum for its proper working. Now all you have to do is to insulate the wires leading to the glass globe that holds the light, and you can carry it under the water without the least trouble.

"For ordinary purposes there is a very simple arrangement, which consists of a box with a plate of glass in the bottom. You put this in the water, so that the glass is a few inches below the surface, and then you can see very clearly, where the depth is not too great. Fishermen in some parts of the world have something of the same nature, which they call a telescope; it is nothing but a tube of wood four or five feet long, and six inches in diameter, and with the top so arranged that when the eye is put against it there can be no entrance of light at that end of the tube. When a man wishes to examine the bottom of the sea where he is fishing, he sinks this tube and looks through it. He can make out many objects that are altogether invisible under ordinary circumstances, and can frequently discover the whereabouts of a school of fish that might otherwise escape him.





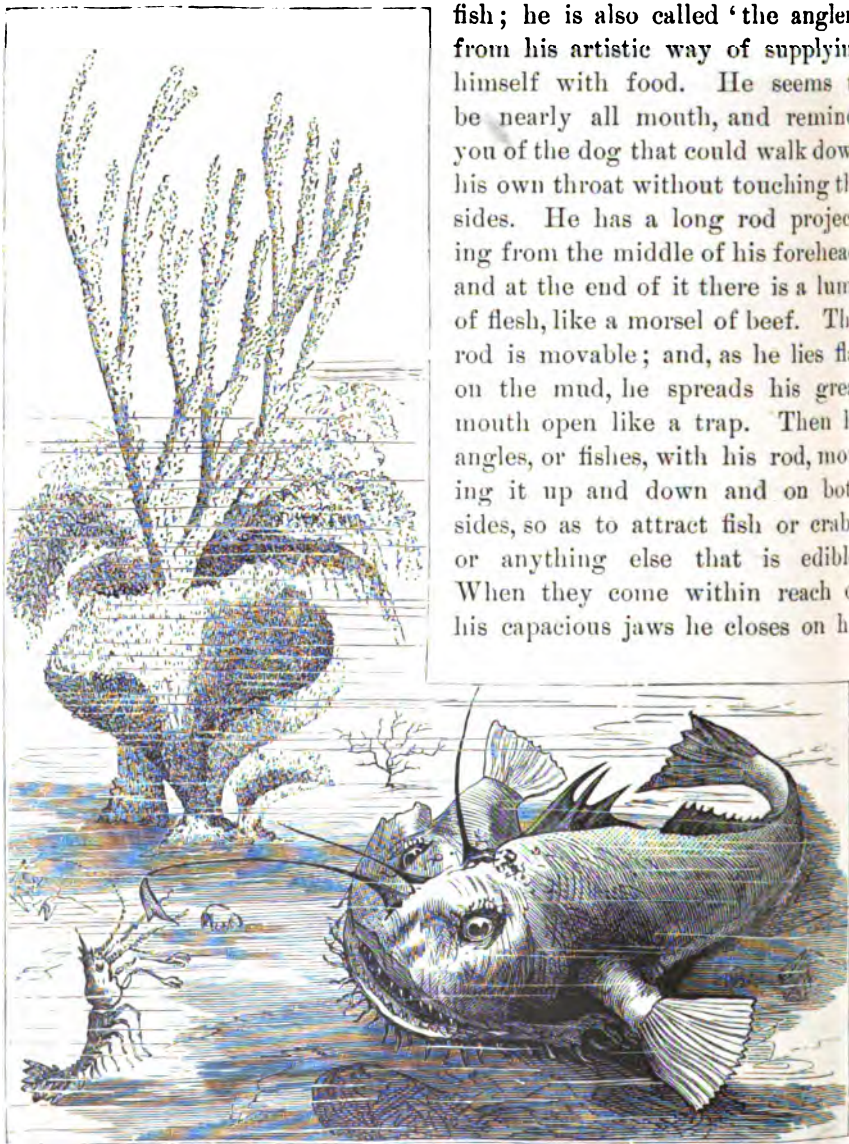
"Sometimes a man who is using one of these aids to marine observation finds himself the object of attentions he would gladly avoid. A friend of mine was once looking through a box from the side of a boat, when a large sawfish came from below and thrust his snout through the glass. A shark followed the sawfish, and was evidently anxious for a fight, and the two swam off together, to the satisfaction of my friend. What made the matter more exciting was that an expert swimmer had just dived from the boat, and gone down to take a survey of the coral-trees that grew on the bottom. He came up safe

SUBMARINE OBSERVATIONS.

and undisturbed, and the probabilities are that the sawfish and shark had been too busy over each other and the glass-bottomed box to pay

any attention to such an insignificant object as a man swimming near them.

"The bottom of the sea abounds in many curious things that we never see at the surface, unless they are brought there. There is a fish known as the *Lophius*, or bellows-fish; he is also called 'the angler,' from his artistic way of supplying himself with food. He seems to be nearly all mouth, and reminds you of the dog that could walk down his own throat without touching the sides. He has a long rod projecting from the middle of his forehead, and at the end of it there is a lump of flesh, like a morsel of beef. This rod is movable; and, as he lies flat on the mud, he spreads his great mouth open like a trap. Then he angles, or fishes, with his rod, moving it up and down and on both sides, so as to attract fish or crabs, or anything else that is edible. When they come within reach of his capacious jaws he closes on his



THE BELLOWS-FISH, OR ANGLER.

prey, and goes on with his fishing as unconcerned as a man who has caught a small trout, and stowed it away in his basket."

The boys laughed at the idea of an angling fish, and wondered how he managed to get along when he had lost his bait by any accident. The captain was unable to tell them, as he had never seen a bellows-fish that had suffered such a misfortune.

"You see thousands of crabs and lobsters and other creeping things at the bottom of the sea," the captain continued; "there is one kind of crab that loves to live in a shell which is not his own, at any rate not the one he was born to. They crawl around with these shells, never daring to leave them for fear some other crab will happen along and take possession. Sometimes two of them will fight for a shell, and they tear away each other's claws and commit other havoc before the battle is over. Generally the one in the shell has the best of it, as he is on the defensive, and the house in which he is lodged is a good protection. One day I found one of these crabs in the bowl of a tobacco-pipe that had the stem broken short off, and it was very funny to see him move around with this awkward covering. It was not as convenient as the sea-shells in which his brethren were quartered, and he seemed to understand it, as he changed to an empty shell as soon as one was placed near him, and he was left undisturbed.



A CURIOUS HOME.

"These crabs are amphibious, and seem equally at home above or under the water. They are very quarrelsome, and when put together in a box proceed to eat each other up without the least hesitation. I once put a dozen of them together, and in two days there was only one left; he was large, and had a good appetite, as he left nothing but shells and crushed claws to tell what had become of his comrades.

"But we have been so long beneath the surface that we must go above to breathe. As we come up we must be careful not to touch one of those long filaments hanging down from the *Physalia* that has spread its sail to the wind. If we do, we shall feel a sharp sting that will last us for some time."

Frank inquired what the *Physalia* was.

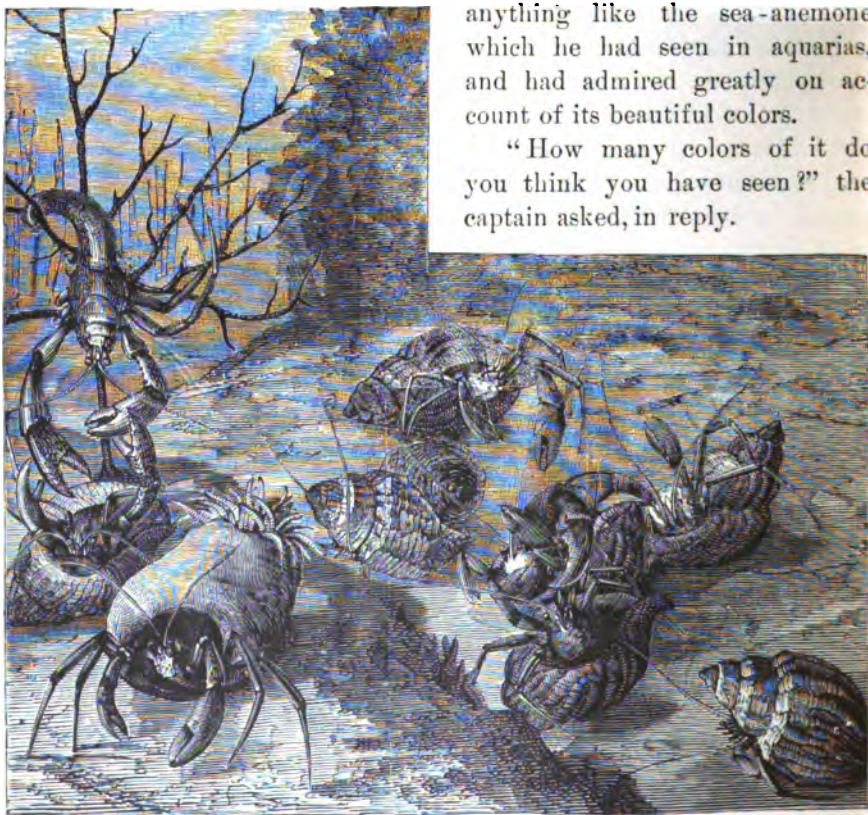
"You have seen it very often at sea," said Captain Johnson, "and probably you knew it as a Portuguese man-of-war."

"Oh, certainly," Frank answered. "We saw thousands and thousands of them on the Pacific Ocean when we were coming from San Francisco, and sometimes the water was covered with them for hours at a time. And they looked very pretty, with their little sails spread to catch the wind."

"What you saw above the surface was not really a sail," the captain replied, "but a little sack containing air. The *Physalia* has the power of contracting this sack, so that it can sink beneath the waves for protection against a storm or to avoid other dangers. The use of the long filaments is not well understood; but they are evidently for purposes of defence, as each of them contains a sting that has anything but an agreeable effect on the swimmer who comes in contact with it."

Fred asked if the *Physalia* was anything like the sea-anemone which he had seen in aquarias, and had admired greatly on account of its beautiful colors.

"How many colors of it do you think you have seen?" the captain asked, in reply.



CRABS IN A QUARREL.





SEA-ANEMONES.

Fred could not say positively, but he thought he had seen not less than three or four.

"They are of every color imaginable," responded Captain Johnson; "we find them white, with a delicate shading of pearl, and we have them in gray, pink, purple, yellow, orange, lilac, green, and blue. Sometimes a single specimen will have half a dozen colors in his composition, and you could easily imagine he had borrowed all the hues of the rainbow in getting himself up to a satisfactory complexion. They have the properties of both animal and vegetable, and in this particular they resemble the sponge and other marine productions. If a part of the sea-anemone is destroyed, it is reproduced; and if one of them is torn or cut into several pieces, each piece converts itself into a perfect anemone."

"Is the sponge an animal?" Frank asked of the captain. "You said

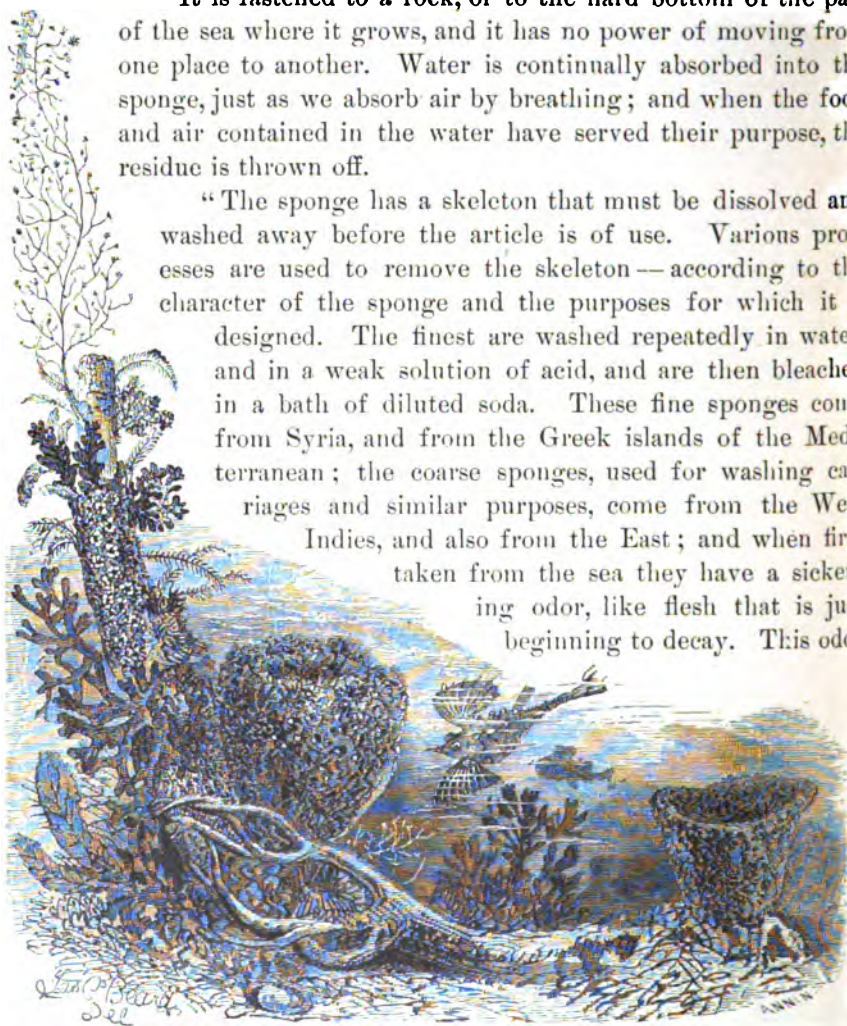


something about the sea-anemone having animal and vegetable properties like the sponge. I always supposed the sponge was a vegetable growing at the bottom of the sea, and had nothing of the animal about it."

"Scientific men have long been in dispute on this subject," was the reply; "and while some assign the sponge to the vegetable kingdom, others class it with the animal. The latest authorities favor the theory that the sponge is an animal, and all agree that it occupies a middle ground between the two forms of life.

"It is fastened to a rock, or to the hard bottom of the part of the sea where it grows, and it has no power of moving from one place to another. Water is continually absorbed into the sponge, just as we absorb air by breathing; and when the food and air contained in the water have served their purpose, the residue is thrown off.

"The sponge has a skeleton that must be dissolved and washed away before the article is of use. Various processes are used to remove the skeleton—according to the character of the sponge and the purposes for which it is designed. The finest are washed repeatedly in water, and in a weak solution of acid, and are then bleached in a bath of diluted soda. These fine sponges come from Syria, and from the Greek islands of the Mediterranean; the coarse sponges, used for washing carriages and similar purposes, come from the West Indies, and also from the East; and when first taken from the sea they have a sickening odor, like flesh that is just beginning to decay. This odor



THE SPONGE AT HOME.



becomes stronger and stronger, and finally resembles exactly that which arises from a putrefying body." During this process of decomposition they are buried in the sand, and are afterwards submitted to the action of the waves to wash away the impurities that the decay has left."

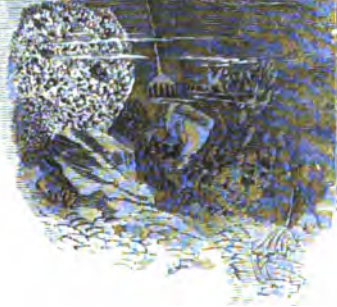
One of the boys asked how sponges were obtained, and at what depths of water they were to be found.

The captain explained that they were found at all depths, from a few feet to two or three hundred. The most of them were taken from shoals and reefs, where they were ten or twenty feet below the surface, as they could not get a good supply of light in deeper water. In the East they are generally taken by diving, after the primitive fashion; while in the West Indies they are speared from boats.

"But we started out to talk about pearls," said Captain Johnson, "and we have wandered off to several other things. Suppose we go back to pearls, and see what we can ascertain about them."

The boys promptly agreed to this; and Frank was evidently determined to begin at the beginning, as he referred to the pearl which Cleopatra was said to have dissolved in vinegar, so that she might swallow a more costly drink than had ever been known to anybody else.

"That was more than eighteen hundred years ago," said Fred, "and perhaps the incident never happened."



HOW SPONGES ARE SPEARED.



Captain Johnson was uncertain about it, as he said he had no documentary proof sufficient to convince an ordinary court of law that dissolved pearls were a fashionable beverage in the days of Antony and Cleopatra. "However," he said, "the pearl can be dissolved in strong vinegar; and this fact is sufficient to establish the possibility of the beautiful Queen of Egypt indulging in the freak that is attributed to her.

"Pearls have been known and valued for a great many hundred years. They are mentioned in the Bible, and in the time of Job they were of great price. The Greeks and Romans had great numbers of pearls, and



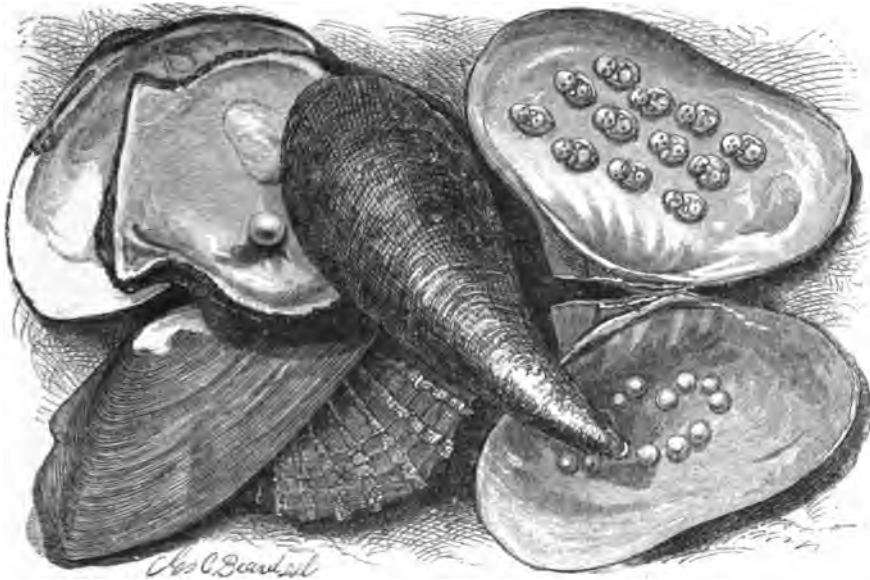
CLEOPATRA DISSOLVING THE PEARL.

some of the wealthy citizens were in the habit of wearing them on their shoes. In all ages they

have been associated with wealth, and probably they will continue to be for ages to come.

"The oyster that produces them is not good to eat; probably he thinks he has quite enough to do to make pearls, without being devoured

after he has performed that noble duty. They are found in various parts of the world; but the best pearls have always come from the East: they are valuable in proportion as they possess that peculiar lustre known as 'water,' which it is impossible to describe in words. There are several varieties of the pearl-oyster, but the best of them is of a nearly circular form, and from four to eight inches in diameter. Here is a picture of



PEARL-BEARING SHELLS.

one of these shells, with a single pearl adhering to it. The outside of the shell is rough, and has a series of ridges that extend from the valve to the edge. The young oysters rarely contain pearls; and the divers understand this so well that, when they find smooth-shelled and small oysters in their baskets, they throw them back into the sea. In the haste of gathering them from the rocky bottom, they have no time to select with care.

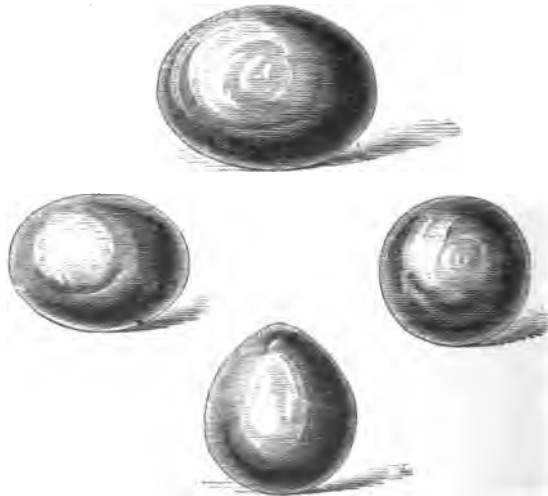
"The pearl is nothing more nor less than carbonate of lime, secreted by the oyster, and hardened after a process which he carefully keeps to himself. It was for a long time supposed that the pearl was formed by the attempt of the oyster to cover a grain of sand with a smooth substance, so that it would not be inconvenient to him. It was believed that the sand was rolled in by the action of the waves while the oyster had his mouth open; and, as he could not expel it, he proceeded to cover it up.

Many persons adhere to this theory still; but the fact that many pearls have been sawed open and found not to contain the least particle of sand or other impurity, is calculated to throw doubt upon it. The latter belief is, that the pearl is the result of a disease in the oyster, just as a tumor is the result of disease in man.

"In China and Japan the natives have long followed the practice of putting small beads of porcelain inside the oyster, and then returning him to the water, where he is left undisturbed for three or four years. At the end of that time he is taken up and opened, and the beads are found to be coated with the pearly substance. They also have the trick of putting little images or idols into the oyster, and in course of time these become coated over in the manner I have described. You can see some of the results of these processes by looking at the two open shells on the right of the picture."

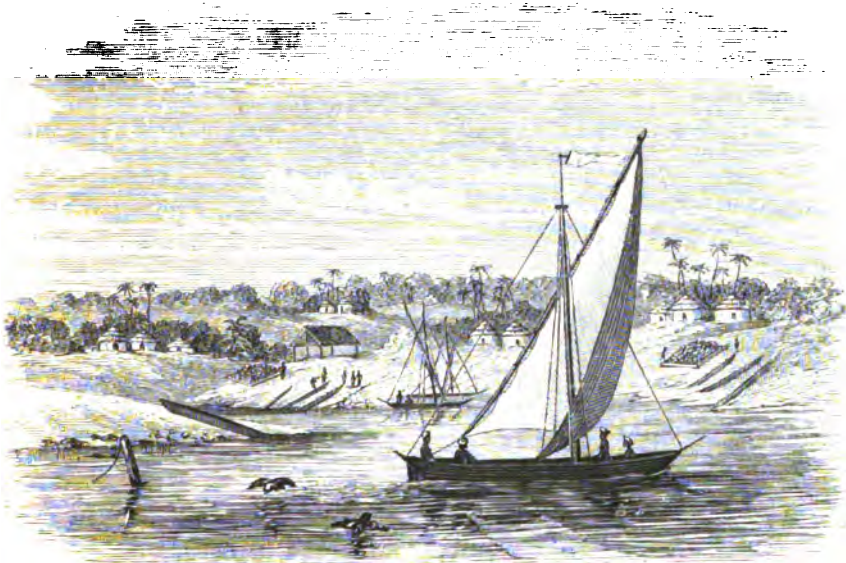
Frank wished to know the different sizes of pearls and their values.

"As to that," said the captain, "your question is not an easy one to answer. Some pearls are so small as to be hardly visible to the eye; and of course they are of no value when you cannot see them. They are only useful when large enough to be strung on a necklace, or otherwise set as jewellery. The largest pearls are apocryphal; by this I mean that no person of modern times has seen some that are famous in history, and there are doubts that they ever existed. It is said that the pearl which Cleopatra drank to the health of Mark Antony was worth \$375,000 of



SIZES OF PEARLS.





PEARL-FISHERY AT BAHREIN.

our money ; and, if so, it must have been of great size. Pearls have been reported to exist that were nearly two inches long by one and a quarter in diameter, and weighed fifty-five carats, or two hundred and twenty grains.

“The largest that we know of at the present time do not exceed thirty carats, or one hundred and twenty grains. There is one among the crown-jewels of Portugal weighing twenty-five carats ; and there is said to be one of twenty-seven carats in the hands of a Russian merchant in Moscow. It is safe to say that there are not two dozen pearls known to exist now that weigh over twenty carats, or eighty grains.

“The value of a pearl is generally estimated like that of a diamond—by the multiplication of the square of its weight. A pearl of one carat is held to be worth about \$16 ; and to get the value of a pearl of two carats we multiply two by two, and the product by \$16, and we get \$64. In the same way the value of a pearl of three carats would be \$144, and so on for any weight we happen to have.

“One of the favorite fishing-grounds for pearls is at Bahrein, on the Persian Gulf. The divers bring in the oysters from the fishing-banks in the gulf, and pile them on the shore in great heaps. Here they lie till they are rotted ; and the stench that arises is enough to turn any inexperienced stomach. When the substance of the oyster is quite decomposed,

the shells are opened, and the mass of matter they contain is thrown into tubs and washed with water. It is necessary to pass the pulp very carefully through the fingers for fear that some of the pearls will be lost, and consequently the washing is very slow. When a pearl beyond a certain size is found, the washer receives a handsome present; but below the regulation figure he gets nothing but his daily wages. Large pearls are very rare, and consequently the chances that a pearl-washer will make a fortune by a lucky find are exceedingly small.

"There is a belief quite current through the East that the pearl is a drop of rain-water which has fallen into the shell of the oyster when he was at the surface, and been afterwards hardened. This is a pretty bit of sentiment; but as the oyster never goes to the surface unless he is carried there, the story does not have much foundation to rest upon."

"If the pearl is so valuable, and so difficult to get, I should think there would be men who would try to imitate it," Frank remarked.

"You are quite right," was the reply; "and men have tried a great many times to make false pearls."

"Have they succeeded?"

"Partially; but not altogether. No counterfeit pearl has yet been made that could pass all the tests of the genuine; but their lustre is quite equal, sometimes, to the best pearls of Ceylon, and they can be made to deceive anybody but an expert."

"How do they make them?"

"The best of the false pearls," said the captain, "are made by what is known as Jaquin's process."

"M. Jaquin was a manufacturer of beads in France, and he spent a great deal of time and money in trying to make his beads better than any other man's. One day he was walking in his garden, and observed a remarkable silvery lustre on some water in a basin. It instantly occurred to him that if he could put that lustre on his beads, he would have something decidedly new.

"So he called his old servant, and asked what had been in the water. She answered that it was nothing but some little fish called *ablettes*, that



PERSIAN GULF DIVER.



had been crushed in the basin, and she had neglected to throw the water out.

"M. Jaquin was very glad, for once, that she had neglected her duty. He began experimenting with the scales of the ablette, or bleak, a little fish about the size of a sardine, and very abundant in certain parts of Europe. After several trials he adopted the plan of washing the scales several times in water, and saving the sediment that gathered at the bottom of the basin. This was about the consistency of oil, and had the lustre he desired. Next, he blew some beads of very thin glass, and after coating the inside of a bead with this substance, he filled it up with wax, so as to give it solidity.



**M. JAQUIN'S EXPERIMENT.**

with this substance, he filled it up with wax, so as to give it solidity.



Thus the fish-scales gave the lustre, the glass gave the polish and brilliancy that we find on the genuine pearl, and the wax furnished a solid



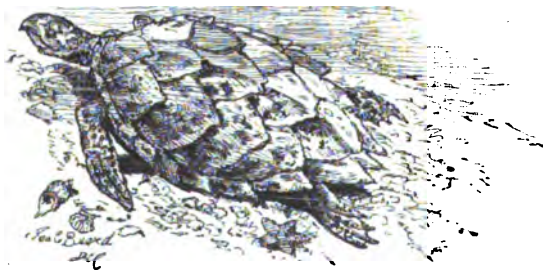
THE BLEAK.

backing to the thin glass. This is the process of making false pearls; and it is fortunate that the bleak is very abundant, or he would run the risk of extermination.

"Is the manufacture of false pearls so great as that?" Fred inquired.

"It is pretty extensive," was the captain's response, "but not enormously so. The fact is, it requires more than a thousand of these little fish to make an ounce of the 'essence d'orient,' as the French call it, or essence of pearl. Other substances have been tried, in the hope of obtaining the same result for a smaller outlay, but none of them have been entirely successful. There is—"

The conversation was interrupted at this moment by a call from the



THE DOCTOR'S DISCOVERY.

Doctor, who was sitting near the rail, and happened to be looking at the sea. The rest of the party rushed to his side, and their eyes followed the direction indicated by his finger.

The object that attracted his attention was an enormous turtle not more than ten yards away. He appeared to be asleep, as he was lying

perfectly still, and did not seem aware that a ship was near him. Suddenly he roused himself, and raised his head an instant above the surface to take a survey of the situation. Evidently he scented danger, as he lost no time in diving below, where the ship was not likely to follow him.

Pearls were dropped from the conversation, and turtles took their place. As the turtle is a product of the sea, the subject was not likely to be an unknown one to Captain Johnson.

"There are several varieties of the marine turtle," said the captain, "and more of the land-turtle, or tortoise; as we are at sea, and engaged on matters connected with salt-water, we will leave the occupant of the land quite out of consideration. His marine brother has fins instead of feet, and he rarely goes on shore except in the breeding-season. Some of the sea-turtles live entirely on vegetable food, while others devour shell-fish and other living things; the flesh of the vegetable-feeders is delicious, while that of the animal-feeders is not. They grow to a great size when compared with the land-turtle: the green-turtle that makes such excellent soup is frequently five feet long, and weighs five or six hundred pounds; and the loggerhead-turtle sometimes reaches a weight of one thousand five hundred pounds and more."

"Enough to feed a great many people," Frank remarked.

"Unfortunately," the captain continued, "a great many people would not eat his flesh. The green-turtle feeds on sea-weed, and is very choice about what he eats, and therefore his flesh is highly esteemed. The loggerhead-turtle is much more common than the green one, but he eats shell-fish of all the sorts he can crush in his powerful jaws. The flesh of the young turtles of this variety is sometimes eaten, but the old ones are so tough and musky that a man must needs be very hungry to be able to eat them. Even their eggs are too strong of musk to be edible, and the shell is of little value; about the only use that can be made of the loggerhead-turtle is to try out the large quantities of oil that he contains.

"The flesh of the turtle you just saw is not of much consequence, for the same reason. He is more valuable for his shell, which forms the turtle, or tortoise, shell of commerce."

"I remember," said Fred, "that we saw a great deal of shell at Nagasaki, in Japan, that had been wrought into many beautiful forms. The Japanese are very skilful in this kind of work, and so are the Chinese."

"You will see more tortoise-shell," was the reply, "when you get to Singapore. A great deal of the shell comes there for a market from all parts of the Eastern Archipelago."

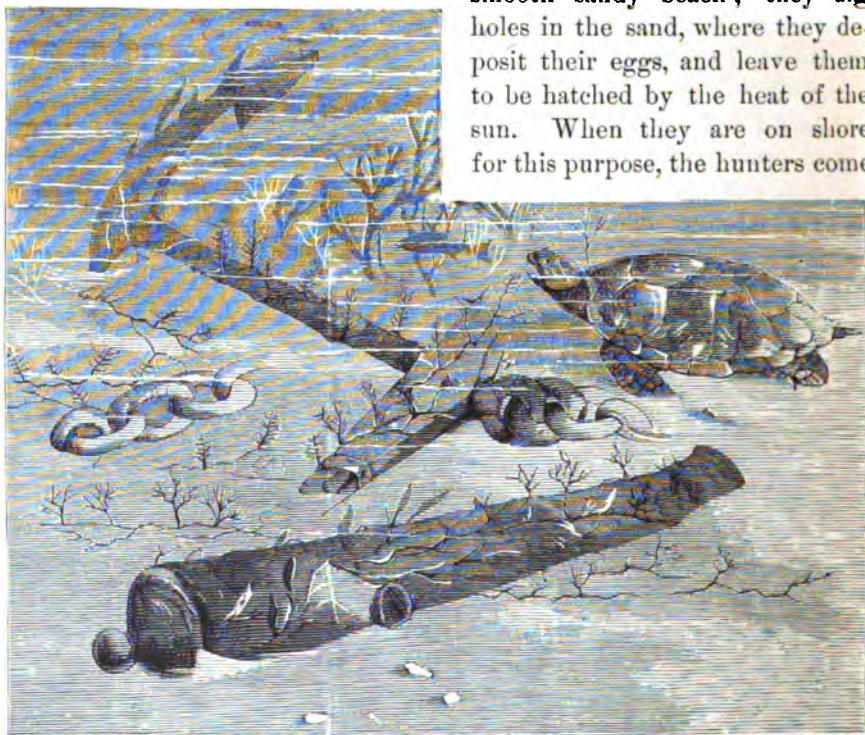


Frank asked how the turtle was caught, when he spent so much time in the water, and was so far away from land.

"He is caught," said the captain, "in two or three ways. He sleeps on the surface of the water, and, when thus off his guard, he can be easily approached. A boat steals quietly up to him, and, before he is aware what is happening, he is a prisoner.

"Turtles are captured at night, when they go on shore to lay their eggs. They generally select a moonlight night for this purpose, and a

smooth sandy beach; they dig holes in the sand, where they deposit their eggs, and leave them to be hatched by the heat of the sun. When they are on shore for this purpose, the hunters come



THE TURTLE AT HOME.

upon them; the turtle cannot move rapidly on the sand, and is easily overtaken. The hunters turn the poor turtles on their backs, and then leave them till the next day, when they come and remove them."

"I have heard," said one of the boys, "that when a turtle is placed on his back he cannot turn over and put himself right side up."

"That is quite correct, and a knowledge of this peculiarity is of great assistance to the turtle-hunters. But there is another way of catching the turtle that will strike you as the most curious of all."

"What is that?"

"It is by fishing with the *Remora*."

"And what is the remora?"

"It is a fish found in tropical waters, both in the East and West Indies. Its popular name is 'the sucking-fish,' and it is so called on account of a disk on its head, by which it can attach itself to a smooth surface, like the side of a shark, a ship, or the shell of a turtle. The disk is very much like the soft leather 'suckers' made by school-boys, and when the fish has attached himself, you can pull him to pieces rather than induce him to release his hold.

"The turtle-hunters go out in a boat and carry several of these fishes in a tub. When they see a turtle they get as near to him as they can, and send a sucker after him. The fish is held by a ring on his tail, attached to a stout cord; he swims towards the turtle and fastens on his shell, and then the fish and turtle are hauled in together. In the air the remora loosens his hold, and is dropped back into the tub, to wait till he is wanted again."

The boys laughed at this comical way of fishing. Fred wondered if the remora was able to understand the joke, and comprehend the value of his services to mankind. Frank said he would like to know what the turtles thought of the business, and whether they had any respect for a parasite that came uninvited and caused them to be captured.



TURTLE-HUNTING.

## CHAPTER XXI.

## INCIDENTS OF A SEA-VOYAGE.—SINGAPORE.

THE voyage from Bangkok to Singapore was without any features of special interest. The Gulf of Siam presented its accustomed calmness, and at times the air was so still that there was not wind enough for proper ventilation of the ship. Our friends slept on deck, as the cabin was altogether too hot for comfort; they only went below to dress and take their meals and baths, and to escape from the showers that were of daily occurrence. In the daytime, when the heavy sprinklings came on, the boys indulged in baths of the kind they enjoyed on the *Danube*, and they were generally pleased at the announcement of an approaching shower. But at night, when they were comfortably sleeping, they did not relish a rude awakening, accompanied with the suggestion that they had better go below till the rain was over. The change from the cool deck to the stifling cabin was the reverse of enjoyable; Fred remarked that the only good thing about it was that it made them appreciate the deck all the more when the rain was over, and they could come again to the open air.

About thirty miles from Singapore they saw an overturned boat, and as they neared it two natives were perceived clinging to the wreck. A boat was lowered and sent to rescue them, and in a short time the poor fellows were safe on the steamer's deck. They said their craft was upset by a squall on the previous evening, and for twenty hours they had been holding on, with nothing to eat or drink, under the broiling heat of a tropical sun. They were nearly exhausted with hunger and thirst, and would have fallen off and died in a few hours if they had not been rescued. Frank was the first to discover the overturned boat, and was naturally proud of having been in some way the means of saving these unhappy Malays from death. He wanted to talk with the men, and hear their story; but as their knowledge of English was no better than his of Malay, he was compelled to abandon the idea.

The occurrence called to the Doctor's recollection an incident of his

first experience of the sea, when he was spending the summer at a small seaport town. He was fond of fishing, and hardly a day passed that he did not go out on the Atlantic in pursuit of his favorite sport.

"One afternoon," said he, "there were a dozen or more boats outside, when a sudden squall came up that caused us to seek the harbor as fast as possible. Every one steered for home, and most of us reached the entrance of the port before the fury of the squall broke upon us. The rain was so thick that we could not see a quarter of a mile off; we could not tell whether any of the boats were capsized or not; and if it had not been that a great rock just by the entrance loomed up, and made a fine landmark, we could not have found our way inside. One after another the boats came in, with the exception of one that had ventured farther than the rest, and was a good distance off the coast when the squall came up.

"It was no use going to look for her that afternoon, as the squall continued till after dark, and raised quite a sea outside. There were only two persons on board the boat; they were a gentleman and his wife, who had come from the city to spend the summer, and had hired the boat for their own use and pleasure. The gentleman understood the management of his craft in fine weather, but nobody could say if he knew how to control it in a squall. So we passed the night very anxiously, and, as soon as the morning light permitted, several of us went out to search for the missing ones.

"Nothing could be seen. We sailed up and down along the coast, and out on the water for several miles, but all to no purpose. With heavy hearts we returned to port, and concluded that it was idle to hope that the missing persons whom we sought would ever be heard of again.

"In the afternoon I went with a young boatman in a skiff to try for fish a little way outside the rock that formed the headland I mentioned. While I was fishing, the boatman was looking around, and suddenly discovered a mass of something on the beach.

"'Perhaps it may be the wreck of the missing boat,' I remarked. 'Let us go and see.'"

"We started on the instant. As we approached the beach I could see something like a human form, and told the man to pull with all his might. He did so; and the instant the boat grounded on the sand, he sprung ashore and drew a flask from his pocket. In half a minute he was supporting the lifeless form of a woman, and holding the flask to her lips.

"We could hardly tell at first whether she was alive or not. In a



little while the draught from the flask revived her, but it was some time before she was able to speak. We wrapped her in our spare clothing, and carried her to the boat; and then we rowed home as fast as we could, so as to call in the aid of the doctor.



ON A FRAIL RAFT.

“Nothing could be seen to show what had become of the man. When the lady recovered, she told us that when the squall struck the boat it was instantly capsized; they managed to make a sort of raft out of the sail and mast, but it was only sufficient to support her alone. Her husband





THE RESCUE.

remained in the water, clinging to the raft and swimming, while she was in a half-fainting condition all through the night. She remembered how the waves rolled around them, how the moon rose up out of the waters, and how the birds flew near them, as if wondering what they were. Then she thought she could see the great rock at the entrance of the harbor, and then — she remembered nothing more till we rescued her on the beach where the waves had washed her.

“What became of her husband we never ascertained ; but undoubtedly

he was weak from exhaustion, and was unable to cling to the raft till it reached the shore. He probably loosened his hold, and sunk in the sea about the time his wife thought she discovered the rock.

"The lady remained in the village till she was able to return to her friends in the city. She never came back to that place; and the accident cast a gloom over the visitors, from which they did not recover for the rest of the season."

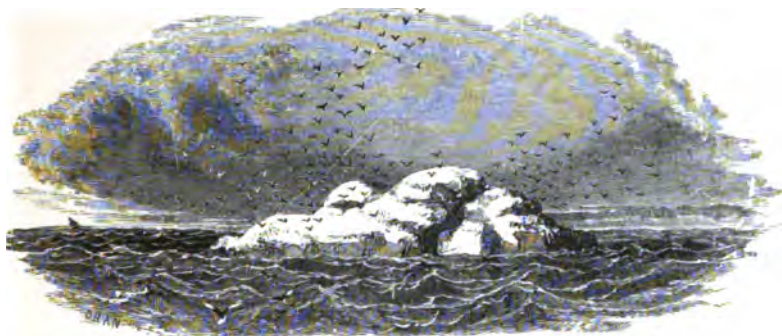
As they neared the Straits of Malacca, the steamer passed great masses of a yellowish plant floating on the water. It bore an abundance of berries of the same general color as the plant, and they glistened brightly in sunshine as they lay close to the surface. The Doctor told the boys that this plant was identical with one that grows in the Caribbean Sea, and is borne northward in great quantities by the current of the Gulf Stream. On the Atlantic it is known as "gulf-weed;" it grows only in tropical



GULF-WEED.

regions, and the berries upon the plant are hollow, and serve as so many air-bladders to keep the plant afloat.

As they neared Singapore, they came in sight of some rocky islands, round which the sea-birds were flying in dense masses. Then other and larger islands, covered with verdure, rose above the horizon to the southward; and, finally, the coast of Malacca and the shores of the Island of Singapore filled the background of the picture before them. Palm-trees



HAUNTS OF THE SEA-BIRDS.

waved in the breeze, and, if there had been nothing else to indicate it, these trees alone would have told the travellers they were well down in the tropics.

The activity of commerce through the Straits of Malacca, and thence onwards to the Farther East, was indicated as our friends approached Singapore. Within a few miles of that port, they met a steamer bound for China; while ahead of them was the smoke of another that had just come from that distant land. As they entered the harbor they met a steamer heading southward for Java; and as they dropped anchor they saw another coming in just behind them. It was the French Mail Packet from Europe, which would halt a day at Singapore, and then continue her voyage to Hong-kong and Shanghai.

The Doctor had made a close calculation concerning their movements, as the French steamer that arrived almost simultaneously with them was the bearer of a dozen letters for the wandering trio. So regular is the mail-service to the Far East, that a traveller who takes the trouble to study the time-tables and arrange his route beforehand, can have his letters reach him at any designated point.

The harbor presented a picture of animation as they came to anchor. Ships and boats were sailing in and out; steam-tugs were puffing noisily



IN THE HARBOR.

around; and, as they swung to their moorings, the official boat of the quarantine-officer passed them on its way to the French packet. Very soon the steamer was surrounded by a group of native boats, and a lively bargaining began for the transportation of the party to the shore. In the Far East the steamers have no concern with the passenger beyond carrying him from port to port; he must land and embark at his own expense, and very often the boatmen have things pretty much in their own way. In Japan and China they are regulated and restrained by law; but in Singapore and some other Eastern ports they do pretty much as they please.

Frank said that the rapacity of the boatmen of Singapore reminded him of the hackmen of New York; and he began to feel that he was not so far from home after all. It required half an hour of negotiation to make an arrangement that was at all reasonable, as the boatmen had evidently formed an association for mutual advantage; and all efforts that the Doctor made to rouse them to competition were of no use. It was finally settled that for a dollar each our friends were to be carried to the shore, and their baggage taken to the hotel, which was not more than a hundred yards from the landing-place.

The hotel was a large structure of one story in height, with broad verandas, where one could sit and enjoy the breeze that generally blows in the afternoon. Singapore is only one degree and twenty minutes north of the equator—eighty miles—and consequently any one who goes there must expect to find a climate of a most tropical character. Longitudinally it is almost exactly on the opposite side of the earth from New York; and this fact gave rise to some interesting comments by Fred and Frank.

"It is sunset now," said Frank, as they went on shore, "and it is sunrise in New York."

"Yes," answered Fred; "and about the time we are going to bed our friends will be finishing breakfast."

"While we are taking our noonday rest to-morrow they will be sleeping soundly, as it will be midnight with them."

"One question occurs to me," said Frank; "it is sunset in Singapore, and it is morning with our friends at home. Now I want to know if it is this morning, or to-morrow morning with them?"

Fred could not tell, and so the matter was referred to the Doctor as soon as he was at leisure.

"The scientific explanation of the subject," said Doctor Bronson as



BOATMEN AT SINGAPORE.

he dropped into a chair, "is too long for us to take up in detail. The earth moves on its axis, so that the sun rises, or appears to rise, in the



east, and to set in the west. An easterly place gets the sun earlier than a westerly one, and consequently its day begins earlier. For instance, the sun rises in New York an hour and five minutes earlier than it rises in St. Louis; and, therefore, when it is noon in New York, it is only five minutes of eleven in the forenoon at St. Louis by New York time. For nautical purposes most nations take the time of Greenwich, near London, as the basis of calculation; and consequently the time of any given place is said to be earlier or later than that of Greenwich, according as the place is east or west of that city. The hour of Singapore is seven hours earlier than that of Greenwich, as it gets the sun in the east seven hours before Greenwich; New York gets it five hours later than Greenwich—four hours and fifty-six minutes is the exact difference; and when it is noon in New York, it is five o'clock in the afternoon at Greenwich.

"We had sunrise in Singapore twelve hours before our friends had it at home; so that, when our day is ending, theirs is just beginning. I will show you, in a practical way, the difference in time between New York and Singapore. I am about to send a cablegram announcing our arrival, and it may possibly get to New York ahead of the time of its departure from here."

The Doctor and the boys went to the telegraph-office, and sent a despatch to let their friends know of their safe arrival from Siam. As the tolls were at the rate of two dollars and forty cents a word, they confined the message to a single word in addition to the address. Previous to leaving home the Doctor had arranged a code or cipher, by which one word could convey a great deal of information. Persons who have occasion to use the Atlantic or other telegraph cables to any extent make use of private codes, and thereby save a great deal of expense. They subsequently learned that their message went from Singapore to New York in nine hours, and therefore reached its destination three hours before they sent it.

The wind, which had been blowing hard during the afternoon, fell off soon after sunset, and the boys found that the nights of Singapore were as warm as those of Bangkok. The arrangement of the rooms indicated that Singapore was anything but a cool place; but, on the whole, it was not disagreeable, as the cool breeze in the afternoon was quite refreshing, and made the atmosphere clear and pure.

Our friends slept well on their first night in Singapore, and were up in good season in the morning to begin their round of sight-seeing. The Doctor had some business to transact at a banking-house in the city, and so it was arranged that they would devote the time between breakfast

and business hours in a stroll along the esplanade and through the native part of the place.

The boys were somewhat surprised at the many races and tribes of men they encountered in their morning walk. They met scores on scores of Chinese; and they were not ten yards from the door of the hotel before they were accosted by a Chinese contractor, who was ready to undertake to show them the place, furnish them with a carriage, buy or sell whatever they wanted, from a needle up to a steamship, or provide them with servants, tailors, or any other kind of assistance they might need during their stay. He was lightly clad, in consequence of the heat of Singapore, and he carried a fan which he kept in constant motion while proposing his services. Singapore is said to contain from eighty to one hundred thousand Chinese, and they are found in all classes of business. There are Chinese tailors and shoemakers, Chinese peddlers and merchants, Chinese book-keepers and managers for the large establishments where trade is conducted by wholesale, Chinese servants of both sexes and all ages, and Chinese of all kinds in addition to the foregoing. The industry of the race is as marked at Singapore as in Canton or San Francisco; and though always desirous of large profits, if they can be obtained, they will put up with very small compensation when a large one is not to be had.



A CHINESE CONTRACTOR.

The door of a tailor's shop stood open, and our friends gave a glance at its interior. The arrangements were very simple. There was a long table covered with a straw mat, on which the material was placed to be cut, and behind this table several men were at work. Frank made a note of the fact that a Chinese tailor makes his stitches by pushing the needle from instead of towards him, and that in Singapore, at least, they do not cover their own bodies to any extent while making clothing for other people. The heads of these tailoring establishments are very industrious in looking for customers, and there was hardly an hour in the day that our friends were not accosted with proposals to make clothing for them at astonishingly low rates. Singapore is a free port, and the great com-



CHINESE TAILORS AT SINGAPORE.

petition in trade has brought the prices down to the lowest figure. For eight dollars each they were accommodated with entire suits of blue serge of good quality; and when the Doctor expressed some hesitation at giving the order, through fear that the cutting and fit might be at fault, the tailor promptly said, "No fitee, no payee." The measures were taken, and on the following morning the clothes were delivered, and found entirely satisfactory.

The Chinese are more numerous at Singapore than any other race. Next to them come the Malays, of whom there are several varieties: they are as devoid of clothing as the Chinese workmen, the entire garments of many of them consisting of a cloth around the loins. Some of them wear turbans, and occasionally the turban seems larger than the man, as it consists of several yards of muslin wound loosely around the head, till it forms a great ball. The body of the wearer will be small, and without an ounce of extra flesh; and Fred remarked that it seemed as though the turban would tip the man over, and compel him to walk on his head.

In their walk the boys saw a group of wild-looking men with woolly hair, and with skins as dark as those of the African negroes, but without

the thick lips which are supposed to indicate the negro race. The Doctor was unable to tell the name of this people, and the question was referred to an Englishman whom they happened to meet.

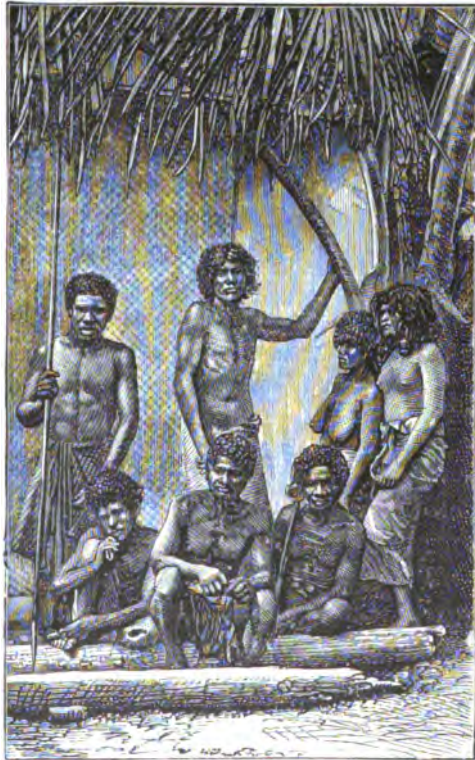
"You mean those people over there?" said the Englishman, as he pointed with his finger to the group our friends had been observing.

The Doctor assented.

"Oh! they are Jacoons," was the reply. "They come from the province of Johore."

Further questioning elicited the information that the Jacoons were a primitive race of men who lived in the forests of Johore, and are popularly supposed to dwell in trees, and to subsist on fruits and nuts. Johore is a province on the main-land of the Malay peninsula, and separated from the island of Singapore by a narrow strait of water. The chief of this province is a man of superior intelligence, and lives on friendly terms with his English neighbors. Since the English settled at Singapore, he has established saw-mills, and made a handsome revenue from the sale of lumber; and he has opened up his territory to settlement by Chinese and other agriculturists. The Jacoons are supposed to be the original inhabitants; they have as little as possible to do with the Malays, and are quite distinct from them in language and features. They are a peaceful people with few wants, and, as the country produces abundantly, they have little occasion to wear themselves out with hard work.

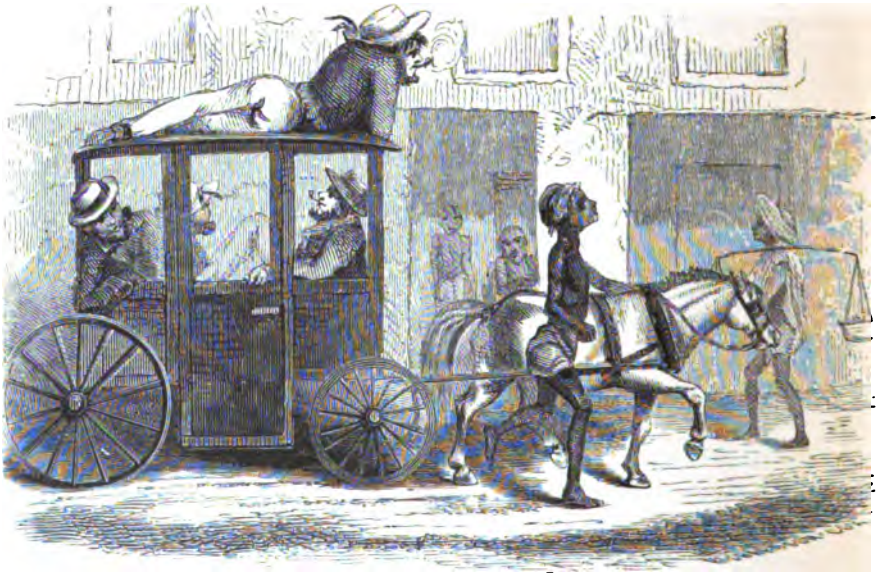
Walking about the streets, or sitting in the shade of the numerous trees, were a few Parsees with their rimless hats, and wearing garments that were more than half European in pattern. They are called sometimes the Jews of the East, from their remarkable shrewdness in business, and their steady progress in the



A GROUP OF JACOONS.

direction of wealth; they are said to be able to accumulate money under very discouraging circumstances, and it has been remarked that a Parsee will grow rich where any other man in the world would starve. Some branches of trade in the East are almost monopolized by the Parsees. A single Parsee house has more than half of the Chinese opium trade in its hands, and has grown enormously rich, while its competitors have lost money. Like the Jews, to whom they are sometimes compared, the Parsees have no country they can call their own. They came originally from Persia, and settled in the North of India, where the most of them are to be found to-day.

There were Klings, or men from the South of India, waiting for work



GARRI WITH A LOAD OF SAILORS.

on the corners, or offering their *garris*, or carriages, for the use of our friends. Most of the carriages for hire in Singapore are driven by these Klings, who are a lithe race, with great powers of endurance, and equally great powers of rascality. A *garris* is a four-wheeled vehicle drawn by a single horse: some of the *garris* have seats for the driver, while others have no place for him, but leave him to walk or run by the side of his beast. The horse is as small in proportion as the man, and the boys were greatly amused to see one of these vehicles with a party of sailors who had just come on shore from an English ship. Three of them were inside, while



one was stretched along the roof of the garri, which he more than covered. They were evidently enjoying themselves, and the driver had his nose in the air, and was doubtless counting up the profits of his day's work, and feeling happy over the result.

The boys were surprised to learn that, while there was a population of more than a hundred thousand Chinese, Malays, Klings, and other Orientals at Singapore, there were not more than a thousand Europeans living there, exclusive of the English garrison. Of these Europeans the English were the most numerous; the rest were Germans, French, Portuguese, Dutch, and Italians, in the order named, and it was said that the Germans were increasing more rapidly than the English, and threatened to have all the business of the place in their hands in course of time.

While our friends were discussing the peculiarities of the population of Singapore, their walk brought them to "The Square," as the commercial centre is called; and, as the hours of business had arrived, the Doctor proceeded to attend to his financial affairs, and learn, in a practical way, the mysteries of banking at the capital city of the Straits of Malacca.



FULL DRESS AT THE STRAITS.

## CHAPTER XXII.

## SIGHTS AND SCENES IN SINGAPORE.

THE incidents of the first day in Singapore were well described by Frank and Fred in the letter they wrote in the evening, to make sure that nothing would be forgotten. The labor of writing was divided between them; Frank describing one part of what they saw, and leaving the rest for Fred. As their time was pressing, the Doctor "gave them a lift," as Fred expressed it, and added something relative to the commerce of the straits, and the importance of Singapore as a place of trade.

Here is the joint letter. Frank said that if two heads were better than one, three heads must be better than two. Fred added that when one of the three was the Doctor's head, he thought it would be difficult for any letter to go ahead of theirs.

\* \* \* \* \*

"We have had a busy day at Singapore. Singapore means 'place of lions;' and probably it is so called because there are no lions here. It stands on an island about twenty miles long and six or eight wide, and is separated from the main-land by a narrow strait. On the main-land there are plenty of tigers, and they sometimes swim over to the island in search of food. Formerly they killed an average of one man a day; but of late years they have not done so well. They are becoming more and more scarce every year, as they have been hunted down till there are not many of them left.

"We had a stroll through the town this morning, and then we went to a banking-house to draw some money. The banker gave us a check on one of the large establishments, and we went there expecting to find an Englishman in charge. We looked around as we entered the door, and not an Englishman or other European was to be seen!

"All the employes of the bank were Chinese—at least as far as we could ascertain. A Chinese paying-teller took the check, and passed it to a Chinese book-keeper, who sat in a little box at the end of the counter. He examined the check, and stamped it after making an entry in a

book; and then he returned it to the teller, who counted out the money and gave it to us without saying a word. There were piles of silver and bank-notes in sight, and all in charge of Chinese. We looked into another bank, where the same arrangement existed; and we went into a business-house where there were at least a dozen Chinese clerks to one European.

"The business of Singapore is centred around what is called The Square, and in a walk of ten minutes you can pass by the most of the large houses for banking and commerce. Here they have also the consulates and the telegraph and steamship offices; and all these establishments imitate the example of the banks in employing Chinese clerks and *compradors*. On the whole, it seems to us that there is very little business of any kind at Singapore that the Chinese have not something to do with.

"The Chinese seem to be crowding the Europeans out of everything; and there is no branch of business that they are not perfectly familiar with. They might send all the English and other foreigners away some pleasant morning, take Singapore into their own hands, and run it just as well as it is run now.

"After we had finished our business with the bank, we took a garri for a drive to the outside of the city.

"There is a famous garden here, belonging to a wealthy Chinese merchant: it is said to be one of the finest gardens in the world, and must have cost a great deal of money. No visitor to Singapore should omit it, even if he has not more than a few hours on land.

"In the first place, Singapore is so near the equator that every kind of tropical tree and plant can grow here in the open air. The mercury shows an average, all the year round, of eighty-five to ninety-five degrees in the shade; and there is hardly any difference between summer and winter. Consequently it is one of the best places, perhaps *the* best place, for making a handsome garden, and the enterprising proprietor has kept this fact in mind. Where he is sure the thermometer will never fall below seventy-one degrees, he can grow anything he pleases.

"Such a lot of tropical things you never saw, and hardly ever dreamed of. There were rows on rows of beautiful palms and bamboos, and other things that only grow in the hot regions; and there was a pond with an enormous *Victoria regia*—the great water-lily that makes ours seem almost like a microscopic object.

"There are said to be more than eighty varieties of the palm; and if there is not a sample of each of these varieties in this garden, I am greatly



CHINESE GARDEN AT SINGAPORE.



mistaken. The garden covers a great deal of ground, and has been made with much care and taste. The owner is very proud of it, and always pleased to have strangers go there and admire it. The keeper, and the men under his orders, are very civil; and evidently the owner has told them that if they are not polite to strangers they will be sent away, and people of better manners put in their places.

"The garden contains a collection of tropical animals, but it is not



MATERNAL CARE.

very large. There was an orang-outang, or gorilla, there, and it was wonderfully like a man in its shape and appearance. It was said to have come from Borneo; and, if so, it was not a gorilla, but an orang-outang, as the gorilla is a native of Africa, and not of the Eastern Archipelago.

"We were much amused at the comical appearance of a couple of

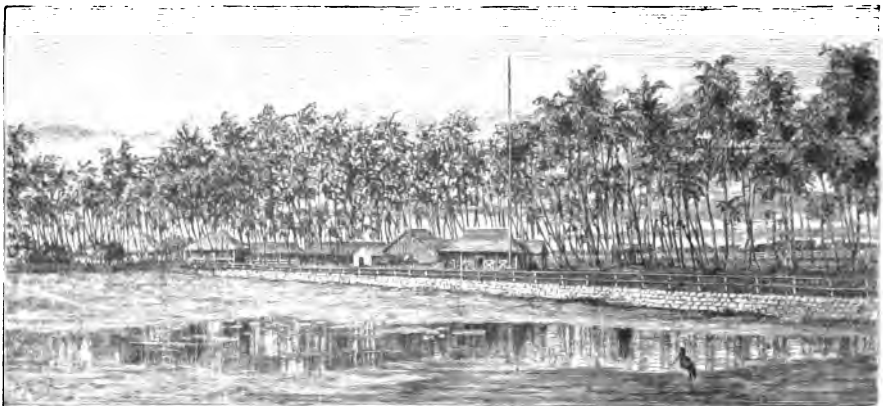


chimpanzees. They were mother and child, and the mother was gravely occupied in arranging the hair of the youngster. He stared at us with his great round eyes; but she did not look up at all, as she was too much engaged with making the young fellow look well. We had a fine opportunity to see the formation of the feet of this variety of monkey; they have thumbs on the hind feet as well as on the forward ones, and as you look at them you can easily understand the readiness with which these animals can climb trees and swing from the limbs.

"The chimpanzees are said to show a great deal of fondness for each other. There is a story that two of them were once kept in the same cage, and one happened to take sick and die. The other was so affected by grief at the loss of its companion, that it refused all food for more than a week, and was finally forced to take something down its throat when so weak that it could hardly stand. It recovered very slowly, and never seemed to forget the absence of its old friend.

"There is another garden at Singapore which is the property of the city; it contains more animals than the private one, and fewer trees. We went to it, and had a pleasant half-hour among the curiosities it contains. The garden is an excellent thing to show strangers what the tropics can produce in the way of animals and birds, and for this reason we were much interested in it, and sorry when the time came to leave.

"The drive that we took led us among the forests of cocoa and other palm-trees that extend all over the island, except where clearings have been made. A large part of the land has been put under cultivation by the Chinese settlers, and they have some very pretty farms and gardens, in which they produce all the vegetables that are consumed at Singapore.



RURAL SCENE IN SINGAPORE.

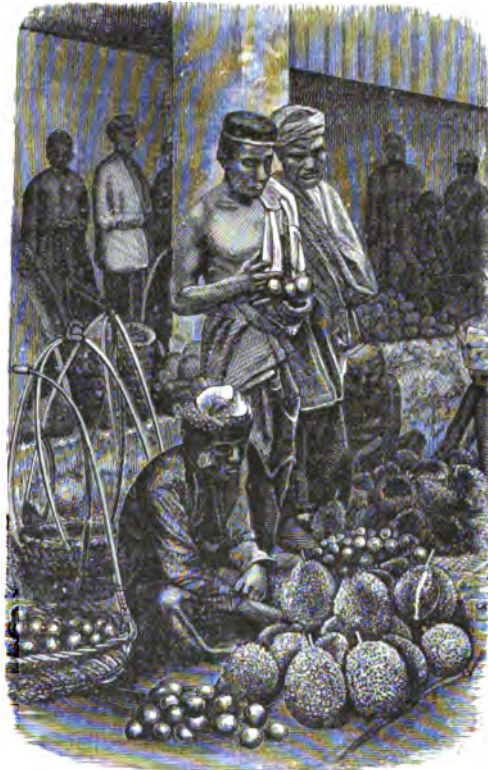
"Several kinds of spices grow on the island, and there are some plantations where pepper is cultivated. They raise considerable sugar-cane, but most of it is used for preserves, and is not converted into the sugar of commerce. Then there are lots of cocoa-nuts grown on the island, and there are many varieties of fruits.

"When we walked through the town in the morning we saw groups of natives selling fruit, and we afterwards saw some of these fruits growing on the trees. They comprised durians, pomegranates, pineapples, custard-apples, mangoes, bananas, and plantains; and we were told that there are more than twenty varieties of the plantain alone.

"The pineapple needs no description, as you have it at home; the custard-apple is about the size of an ordinary apple, and has a soft pulp surrounding the seeds. The best way to eat it is to scoop out the contents with a spoon, and it is this way of eating more than the taste that has given it its name. But the durian is the largest and funniest of all these tropical fruits.

"The durian is like a small pumpkin, with a rough skin so hard and thick that the birds cannot make much impression on it. The seeds are nearly as large as chestnuts, and each seed is surrounded by a soft pulp, just as the stone of a peach is embedded in the body of the fruit. People who live here grow very fond of it, but travellers do not learn to like it until they have made a good many attempts. It is not the taste that repels them, but the smell, and this is something atrocious.

"We have tried to eat it, but could not do so even by holding our noses, for the disagreeable odor would rise in spite of all precautions we



FRUIT-SELLERS AT SINGAPORE.

could take. We are told that the best way is to have the servants cut it up and put the pieces in milk, and by taking them out of the milk and swallowing quickly the smell is avoided. Perhaps this might work; but a better plan would be to have the servants eat the stuff up when it was properly prepared, and let you hear nothing more about it.

"All the merchants who can afford the expense of a bungalow, or private residence outside the city limits, are sure to indulge in it. The consequence is that there are many of these residences; and as they always have plenty of ground around them, and an abundance of shade trees, the bungalows make a very pretty picture, or a succession of pictures. The bungalow has wide verandas and overhanging eaves, and as nobody wants to climb stairways where the heat is as great as in Singapore, you rarely find a dwelling of more than one story. Then these merchants have carriages of their own, and do not depend on the garries; and in the evening



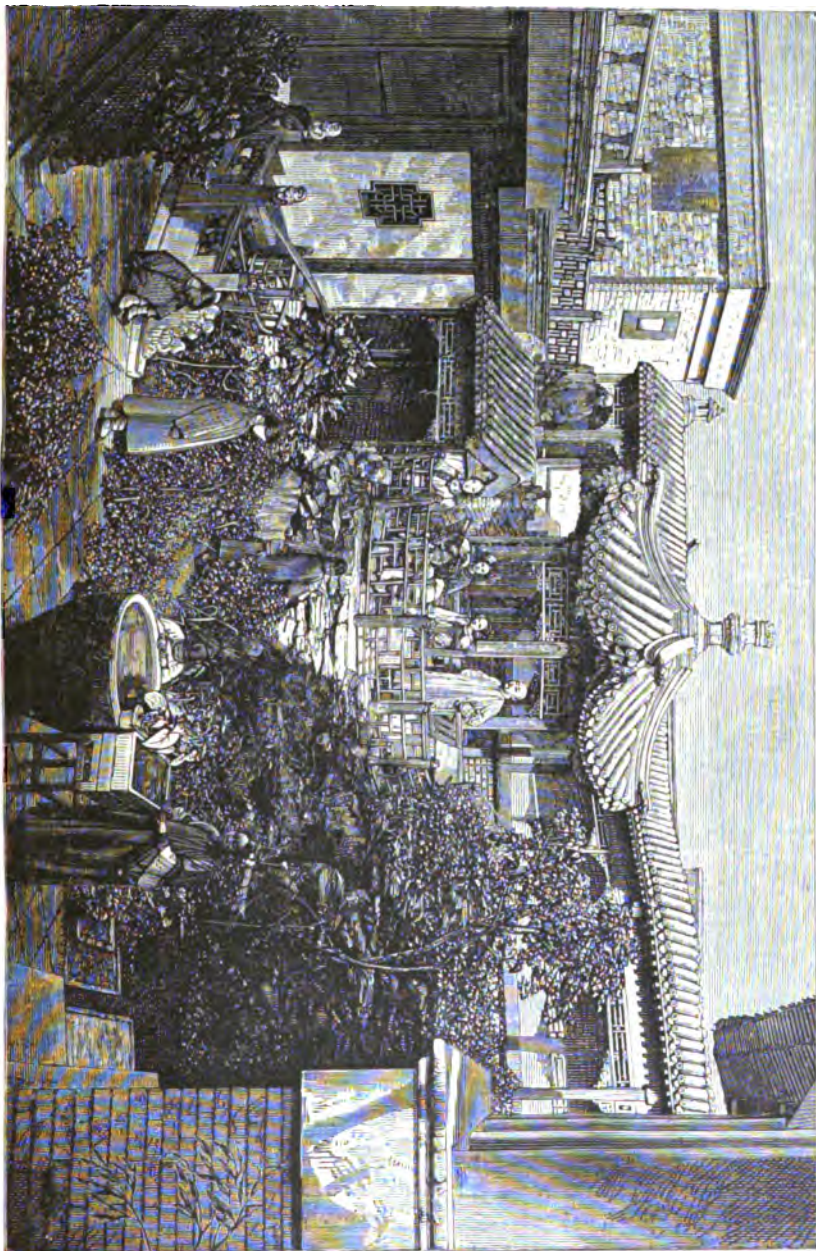
A BUNGALOW.

their carriages driving along the esplanade road make a fine appearance. The rich Chinese endeavor to live after the manner of the Europeans; they have their bungalows and their carriages, and some of the finest of the latter that we have seen were the property of Chinese merchants. Their passion for fine gardens is greater than that of the Europeans, and several of the bungalows have a very costly surrounding of grounds. The fine garden we have described is not by any means the only one belonging to a Chinese resident of Singapore.

"The horses they use here are from Australia, and whenever a lot arrives by a ship they have an auction in the square. They say that some of the horses turn out well, and increase rapidly in value; while others seem to be much affected by the climate, and do not last more than a



CHINESE GENTLEMAN'S GARDEN.



year or two. The horses fetch good prices, and the trade of bringing them from Australia is said to be quite profitable.

"Everywhere we go we see Chinese. They are of all classes, from highest to lowest, and from honest to dishonest. They are in every kind of business, and they have their guilds or trade associations just as they have them in China. They occupy official positions under the government, and on several occasions there have been Chinese members of the Legislative Council of Singapore. Once in awhile there is trouble between them and the Europeans, arising out of questions of commerce: but for the most part everything runs along smoothly, and the Chinese show a perfect readiness to obey the laws, and live as they ought to live. And speaking of their trades-unions calls to mind an amusing story.

"They carry the principle of trade association into everything; and the thieves and gamblers have their guilds and gods like the others. The guilds have rules and regulations that are very strict; and if a man violates them he is liable to be expelled, and driven to seek a living by honest means. When thieves wish to commit a robbery, they must consult the officers of the guild and get their permission, and they must pay a certain amount of the profits for the support of the association.

"Sometimes they go in parties of a hundred or more; they surround a house and plunder it by force, and they usually manage it so that the occupants cannot make any resistance. It is said that when a house is to be robbed, the thieves will scatter a narcotic drug about the rooms that has no effect upon themselves, but will put a European to sleep. He sleeps till long after the robbery is finished, and does not suffer the least injury by inhaling it.

"When a thief enters a house to practise his profession, he removes his clothes and oils his body all over. He winds his pig-tail around his head—having previously stuck it full of needles. If anybody attempts to grasp his arm or leg, he slips off like an eel; and, if he is seized by the pig-tail, the person who takes hold of it is sure to let go in a hurry. Who shall say that the Chinese thief is not a shrewd operator?

"One of the curious things that we saw was the poultry-market. Poultry includes a great deal more here than at home: as we found not only chickens, ducks, geese, and other familiar things, but a great variety



THE GOD OF GAMBLERS.



of pigeons, quails, pheasants, and other edible birds from the forest. Then there was an abundance of parrots, lories, cockatoos, and paroquets, besides other birds whose names we did not know. Such a screaming and cackling you never heard in your life. The heat is so great at Singapore that everything to be eaten must be sold alive, as it would begin to decay in a very short time after being slaughtered. Most of the chickens were in coops, or tied together by the legs; and the same was the case with the geese and ducks.

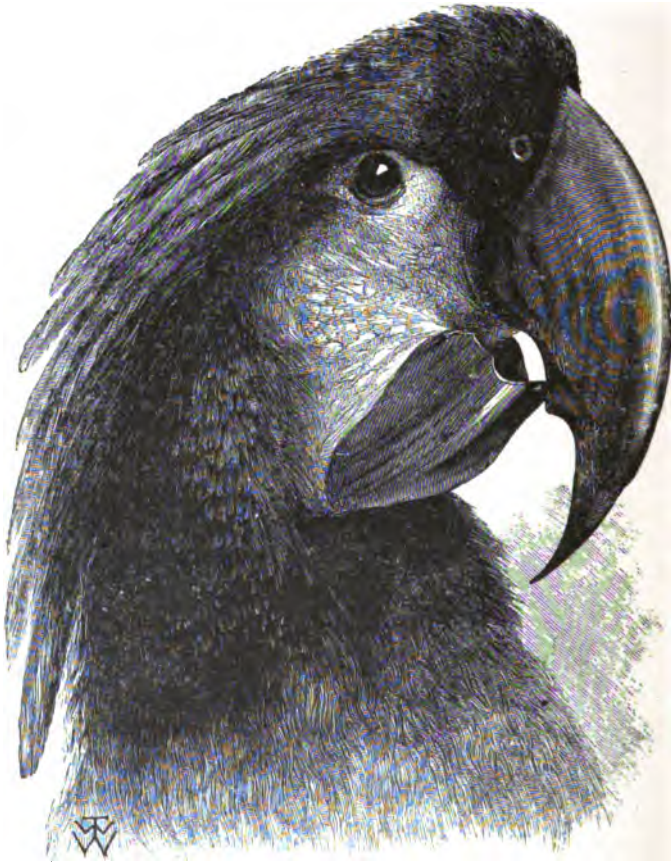
"The parrots, and members of their family, were generally secured by strings to little perches, and they kept up an incessant chattering in the Malay and other Oriental tongues. One was offered to us that spoke English; but, as his vocabulary consisted only of a half-dozen words of profanity, that had been taught to him by a sailor, we declined to purchase. A crowd of men and boys surrounded us with birds in their hands, and on their heads and shoulders; all talked at once, and offered their birds at very low prices. We could have bought paroquets for twenty-five cents; and a talking-parrot, very large, and white as snow, was offered for six dollars, and could have been had for three. How they manage to find a market for all the birds they bring to Singapore it is difficult to imagine.

"You may be interested to know how these birds are brought here, and where they come from. They are from the many islands south of Singapore that form the Malay Archipelago, and they are brought by the natives on speculation. When the south-west monsoon begins, a family starts in its little boat for a voyage of from one to three thousand miles; and the boat is one in which an American would be unwilling to risk a voyage from New York to Boston. They run along from port to port, trading a little wherever they can, and ultimately reach Singapore. The boat has a deck, with a slight awning of woven grass, and is covered with



MALAY BOY IN THE BIRD-MARKET.

the family and birds—the latter being numbered sometimes by the hundred. In the hold they have shells, feathers, spices, and other products, and they are constantly making exchanges at the places they visit. They sell their cargoes at Singapore, and buy a lot of cotton-cloth, hardware, and other things that are in demand where they live, and then go back as they came. This accounts for the large number of birds exposed for sale in the poultry-market, and the low prices they are held at.



HEAD OF BLACK COCKATOO.

“Among the birds offered to us there was a black cockatoo, with a splendid head and crest. His bill had a point like a needle, and was very large and strong. We wondered how he could eat, and what he lived on, as the shape of his bill and his lower jaw seemed the most awkward that one could imagine. We asked his owner to feed the bird, and

gave him a few cents to show us how the operation of eating was performed.

"The man brought a triangular nut which had a smooth surface, and was so hard that we could not crack it without a hammer. The bird took the nut endwise in his bill; he held it in place by pressing his tongue against it, and then began sawing across it with his lower jaw.

"When he had cut a deep notch in this way, he turned the nut a little, and used the underjaw as a wedge to break off the end. Then he held the nut in one claw, and with the sharp point of his bill he picked out the kernel; and as fast as he brought a bit of it to the light, he seized it with his long tongue. Whether the bird was created for the nut, or the nut for the bird, is a question for the naturalists; at all events, each seems to be perfectly adapted to the other. The fitness of the cockatoo's beak to the process of opening this hard product of the forest is as exact as it could be made.

"While we were in the market a man kept endeavoring to attract our attention to something he had in a large basket; we supposed it was a new kind of bird, and went to see it. It proved to be a large snake, and the man urged us to buy with all the eloquence of which he was capable. We are not buying snakes just now, and so we left him to find another customer.

"Snakes are abundant in this part of the world, and there are all the varieties a man could want. Over on the main-land of Malacca they have some very large ones, and you are liable at any time, when walking in the forest, to come across a huge python swinging across your path. They come into the houses and make themselves at home, and they never wait for an invitation.

"A gentleman who has spent a good deal of time in this region tells an interesting story of a visit that a snake made to him.

"One evening, just as he was going to bed, he heard a noise on the roof overhead, but thought nothing of it. The next day he was lying down with a book in his hand, just after dinner, and, happening to cast his eye upwards, he saw something on the thatch that resembled a large tortoise-shell. It was spotted with yellow and black marks; and while he was wondering who could have put the shell there to dry, he discovered that it was a snake coiled up, and lying asleep.

"The gentleman got up very quickly, and called his servants. As soon as they learned there was a snake on the roof they were greatly frightened, and ran out of the house to call some laborers from the plantation. Several men came, and one of them, who was familiar with the



EJECTING AN INTRUDER.



habits of the snake, proceeded to make a noose of bamboo and slip it over the reptile's head. He succeeded in this, and dragged the snake from the roof; then he took the creature by the tail, and tried to run out of the house with him.

"The snake coiled around the chairs and posts, and gave the man considerable trouble in ejecting him from the premises. As soon as he had his prize outside he had a clear field, and soon made an end of the serpent by dashing his head against a tree. The snake was more than twelve feet long, and was capable of doing serious damage if he had given his attention to it. The gentleman was not in a pleasant frame of mind when he found that he had slept all night with the snake over his head, and had taken his afternoon nap in the same position.

"We haven't seen any tigers for sale, but there is no doubt we could find plenty if we wanted them. What with tigers and snakes and other things, not to mention the heat and the danger of fever, Singapore and the surrounding country do not appear desirable as a permanent residence. Yet there are people who say they like it out here, and are quite willing to stay. We are not of that mind; and nobody who cares to live near the Straits of Malacca need have any fear that we will ever try to get his place away from him.

"We would like to go over to Johore and see what the main-land is like, but we haven't time for the journey. There is a fine road across the island, to where you can take a boat and cross the strait. It is a drive of about fifteen miles, and is said to be very interesting, as it takes you through forests of palms, and past plantations of pepper and gambier. Perhaps you don't know what gambier is? We didn't till we came to the East.

"It is the dried and refined juice of a plant that grows in Malacca, and is much used in dyeing and tanning, and also for stiffening silks. Great quantities of it are shipped from Singapore to Europe, and it forms an important item in the commerce of the place.

"The Maharajah of Johore is the son of the one from whom, in 1819, the English bought the island of Singapore. They gave sixty thousand dollars cash, and pay an annual subsidy of twenty thousand dollars; and they have kept on paying it without complaint. As the place is an excellent market for everything that the region produces, the Maharajah has become rich, and is on the best of terms with the English; he frequently visits the governor and is visited by him in return, and when any person of distinction comes here he is invited to stop as long as he likes at Johore. The Maharajah is a strict Mohammedan, but he has adopted



many of the features of European life in his household. He has a French cook, and his dinners are served *à la European*. When entertaining visitors from England or America, he generally wears a dress-suit after the European manner; and he has so far overcome the prejudices of his religion as to invite ladies to his table.

"The currency of Singapore is the dollar, or, to be more explicit, the Spanish dollar. It is divided into one hundred cents, like our dollar, and all transactions are reckoned in this currency. But you find all kinds of money in circulation—English, French, American, Dutch, and Spanish; and if you want rupees, or any other Eastern currency, you will have no difficulty in getting it. The cosmopolitan character of Singapore is very well illustrated in the many varieties of coin in circulation.

"We have found a new type of mankind here—the Eurasian.

"You will possibly ask, 'What is the Eurasian?'

"The word is compounded of 'Europe' and 'Asia,' as you can easily perceive, and the man who bears that name is of mixed European and

Asiatic blood. The most of them have adopted the European dress and manners, and refuse to associate with the natives, while, on the other hand, they are not admitted to European society. Consequently they are in an unhappy position, as they are neither the one nor the other, and there does not appear to be any recognized place for them. They have been said to combine the vices of both their parent races, with the good qualities of neither; there are some men of ability among them, but, on the whole, the remark has a great deal of truth in it.

"In Singapore there are many descendants of the early Portuguese settlers of the East; they still preserve the Portuguese language, and adhere to their religion, though sometimes they are rather weak in both. It is a curious fact



A NEW TYPE OF MANKIND.

that, though they preserve the features of Europe, their skins are frequently darker than those of the natives; and the spectacle is not an infrequent one of a man with Caucasian features, and a complexion black as a piece of anthracite coal.

"If you wish to realize the importance of Singapore as a place of trade, you have only to look at a map of the Eastern hemisphere and observe the position of the city. It is a convenient commercial point for China and Japan, for Java and the Malay Archipelago, for Siam, and even for Australia. Ships going between Europe and the far East rarely pass Singapore without stopping, and the great lines of steamships have a large business here. The commerce has steadily increased every year, and there is no sign that it will decline. Some of the old merchants complain that competition has ruined trade; they sigh for the return of the days when they had only one mail a month, and there was no telegraph to give hourly quotations of the prices of goods in all parts of the world. In those days business was confined to a few houses, and the chances of an outsider were slight indeed. Fortunes were sometimes made by a single venture, and not unfrequently a merchant had exclusive information of advances or declines that he could have a whole month to operate upon, without the least fear that anybody would be able to interfere with him.

"Profits are smaller to-day, and capital must be turned very often; the volume of business is far greater than it used to be, and the men who regret the good old times are forced to accept things as they are."

## CHAPTER XXIII.

## CROSSING THE EQUATOR.—ADVENTURE WITH MALAY PIRATES.

THERE were several things held in reserve to be seen on the second day in Singapore. Our friends went to the museum and library, which are in a large building near the esplanade or park where people stroll in the afternoon, and not far from the road which forms the fashionable drive. The library is an excellent one, and contains a great number of works on the East; the Doctor spent an hour or more among the books, and, while examining their titles and contents, he came upon a volume which was written by one of his intimate friends in America. It was entitled "Overland through Asia," and described a journey that the author once made across the northern part of the Eastern hemisphere.

There was a fair collection of minerals and other things in the museum, and the boys were interested in a huge python that lay coiled around some rocks in the centre of one of the rooms. The director of the museum told them that the serpent was kept in a cage in the museum for some time, but it was finally determined to kill and stuff him, so that his appearance could be more readily studied by visitors. The work of killing was more serious than had been anticipated; it was done by means of chloroform, as they did not wish to injure the reptile's skin by lacerating it.

A sponge saturated with chloroform was introduced between the bars of the cage, and held over the head of the python as he lay asleep. Instead of being stupefied, he was awakened by it; and he indicated most emphatically, by moving his head away, that he did not like that kind of treatment. He refused to breathe the narcotic, and it became apparent that some means of compelling him to take it must be adopted.

A noose was passed over his head, and he was drawn forward so that his nose was at the bars of the cage. Then the sponge was again applied, and he was forced to inhale the chloroform, whether he wanted to or not. He lashed about from side to side, and sometimes it seemed as though he would tear the cage to pieces with the violence of his demonstrations.

All this time he was breathing the narcotic; but it was nearly an hour before he was fairly under its influence, and another hour was required to reduce him to a state of quiet. Even when he had ceased to lash around so as to threaten injury to the cage, his body was constantly giving convulsive twitches, and these did not end for several hours. The gentleman who superintended the operation said that the snake was the worst patient he ever saw under the influence of chloroform, and the hardest to manage.

They took another drive into the country, over a road that had been newly opened. Their way led them near a native village, where the houses were thickly thatched with grass and strips of palm-leaf, so as to keep out the heavy rains that frequently occur. It is said that at Singapore more than half the days of the year are favored with showers, and the records show that in some years they have had two hundred and odd rainy days. The rain cools the air, and it is probably owing to the rain and wind that there are so few cases of fever among the Europeans. Sometimes the wind develops into a lively squall that sets all light things in motion and fills the air with clouds of dust. It frequently happens that the papers on the desk of a merchant will be sent flying about the room, and possibly out of the window; and there are stories of valuable documents and notes of the Bank of England being whisked away, so that their owners never saw them again.

They saw groups of Klings and Chinese along the road; and in one instance four of the former were holding a discussion over a basket of fruit, and making things so lively that the boys thought there would be a fight. The Klings do not bear a good reputation among the Europeans, and are not on friendly terms with the Chinese. They are first-class rascals in all their dealings where they can take advantage; and, if there is no danger of receiving punishment, they are almost certain to be insolent. On the other hand, they are cringing to their superiors, and make the utmost professions of friendship, while ready at any moment to indulge in the meanest treachery. The Chinese, with whatever disagreeable qualities they possess, are much to be preferred to the Klings.

Frank and Fred were amused at the costumes of the native nurses, whom they occasionally saw in charge of European children. They were more noticeable for their comfort in the hot climate of the tropics than for elegance of design; and it was evident that the expense of keeping one of these nurses in clothing was not great. The native children go quite naked until five or six years of age, and even later; and it was



KLINGS AND CHINESE.

not an uncommon sight to see a woman bearing a water-jar, and followed by a little urchin entirely destitute of clothing, in marked contrast to the European children, who were dressed after the custom of the country whence their parents came.

The native women are fond of ornaments in their ears, like the women of other countries, and a good many of them have their noses pierced and decorated. Anklets and armlets of silver and gold are also worn, and it is not unusual to see a woman, whose entire clothing has cost less than a dollar, almost weighted down with jewellery worth a goodly sum.

They visited the new harbor of Singapore to see the ship on which they intended leaving the following morning for Java. The new harbor is known as Tangong Pagar, and has the advantage over the old one of allowing ships to lie at a dock instead of anchoring a considerable distance from shore. The docks are well built, and there are mountains of coal piled up there to meet the wants of ships. Singapore is an impor-



tant coaling-station for ships in the Eastern trade, and sometimes a dozen of them may be seen taking coal at Tangong Pagar at the same time.

Our friends were satisfied with the appearance of the steamer; and when they had completed their inspection they returned to the hotel, and from there went to the office of the Dutch Steamship Company to engage passage. Every week there is a steamer leaving Singapore for Batavia. One week it is a French ship, and the next a Dutch one; the latter runs in connection with the Peninsular and Oriental line; while the former belongs to the great company which carries the French mail from Europe to the East. It happened to be the week of the Dutch ship when Doctor Bronson and his young companions were at Singapore, and they



NATIVE NURSES AND CHILDREN.

congratulated themselves that they would have the opportunity of going on a vessel of a nationality new to them.

Frank and Fred opened their eyes in astonishment when they learned the price they were to pay for passage to Java.

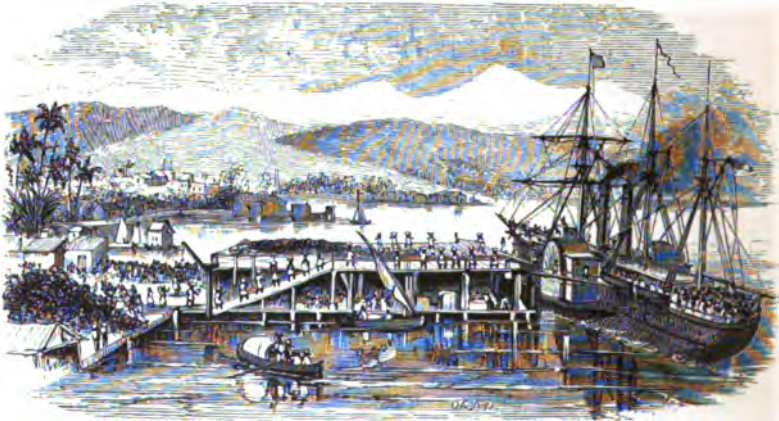
"Forty-six dollars!" exclaimed Frank; "and for a voyage of forty-eight hours!"

"And it is only five hundred miles from Singapore to Batavia," Fred responded. "How much does it cost to go from New York to England, and what is the distance?"

The Doctor informed him that it was about three thousand miles from New York to Liverpool, and the passage was usually a hundred dollars for the best places on the best steamers.

"At the rate from here to Batavia," said Fred, "we should have to pay two hundred and seventy-five dollars for the transatlantic voyage where we now pay one hundred dollars. Why does it cost so much more here than on the Atlantic?"

"In the first place," the Doctor explained, "there are comparatively



COALING AT THE DOCK.

few people travelling here, and the companies are compelled to ask high prices in order to keep up their ships. Where a steamer between New York and Liverpool would have a hundred passengers and more, and consider it only an ordinary business, you will rarely find more than twenty or thirty passengers on a steamer in the Far East. Coal is much more expensive here than in the North Atlantic ports, and so is nearly everything else that is used on a ship. In these hot regions the passengers need more room than on a transatlantic steamer, and more personal comforts generally."

"But don't they ever crowd the passengers rather uncomfortably?" Frank asked. "It seems to me that I have heard you speak of a very

disagreeable voyage you once had on account of the unusual number of people on the steamer you travelled on."

"You are quite right," the Doctor replied; "and it was on this very route, from Singapore to Batavia. I was on the French steamer; and the agents told me there would be plenty of room, as only a few passengers were engaged. She had eight rooms, with two berths to a room, so that her complement of passengers was sixteen. But when we came to start we found that we numbered fifty-two; and you can easily understand that we had a hard time of it. We were packed something like sardines in a can, and all were heartily glad when the voyage was over. If we could have laid hold of the Singapore agent of the company we should have treated him as roughly as the laws of the ocean permit; but he had the advantage of being on shore, and quite out of our reach."

The trio of travellers rose early the next morning, as the steamer was advertised to leave at seven o'clock, and the dock was a long distance from the hotel. Their baggage was piled in a small cart drawn by a bullock, and started off some time ahead of them, so as to be at the steamer before they reached there in the more expeditious garri. When they had swallowed their morning coffee and came out of the hotel, they found a group of servants waiting near the door to ask for money, as a reward for their services. Frank said the only energy the fellows displayed during his acquaintance with them was in this final act of begging; it was far from an easy matter to get any service out of them, as their chief occupation was gambling, and they were too much engrossed in it to pay any attention to common things.

The steamer sailed promptly on her advertised time. During the last half-hour of their stay at the dock, the passengers were amused by the antics of a lot of men and boys who dived for money. They were in



CARRYING COAL ON BOARD.

small boats close to the steamer, and whenever a coin, silver or copper, was thrown into the water, a dozen of the fellows plunged over in search of it. Generally they caught it before it had gone far below the surface, and sometimes there would be a struggle between two of the divers for the possession of a coin. The loser would appeal to the passengers to throw over a piece which could be his special property, and he very often succeeded in inducing them to do so.

The Doctor told the boys that the quarrel over the money was a clever bit of acting, as the fellows were associated, and the result of the day's work was divided equally among them. Sometimes they refuse to dive for copper coins, and will only go over for silver. If any coppers are thrown they decline to move, and say it is impossible to see copper at the bottom of the water. Consequently their harvest is in silver; and if any copper has been dropped, they dive for it after the ship has gone.



SERVANTS ON DUTY.

The route of the steamer proved to be very picturesque. The numerous islands that lie at this part of the Straits of Malacca were visible in whatever direction our friends turned their eyes, and away to the right was the coast of Sumatra, thickly clothed in tropical verdure. The islands were so many, and lay so irregularly, that the steamer was obliged to change her course every

few hours, and Fred thought before noon that they must have steered to every point of the compass since they left Singapore.

The sky was clear, and the heat of the sun poured fiercely down on the triple awning that covered the stern of the ship's deck. But it was less severe than the boys had expected to find it; and they both agreed that the Gulf of Siam was quite as uncomfortable as the Java Sea near the equator.

Our young friends were full of excitement at the prospect of going into southern latitude. They were frequently studying their maps and looking at their watches, so as to be on the lookout for the equator at the moment of crossing it.

"We left Singapore at seven in the morning," said Frank, "and we had eighty miles to go to reach the equator. The steamer is running ten miles an hour, and according to my calculation we should be on the equator about three o'clock."

Fred was of the same opinion; and it was determined that they would watch closely from two till four o'clock, and see if the southern hemisphere was in any way unlike the Northern one; and so they watched while the steamer moved on and on towards the south. A little past



SCENE ON THE SUMATRA COAST.

three in the afternoon the Doctor told them they were probably in the region of no latitude, and that the equator was under their feet.

"I tell you what, Frank," said Fred, "it may be all my imagination, but it seems to me that the sea has a different appearance here from anything I have yet seen."



"What is that?"

"Why, you know that everywhere else when we are at sea we appear to be in a hollow or basin, and the horizon line of the water is higher than we are. Now, as I look off from the steamer, it seems to me that the world rounds away from us, and if my eyesight was strong enough I could see the North and the South Poles. Instead of being in a hollow, as we have always appeared to be heretofore, I seem to be on a great globe, or the summit of a rounded hill."

Frank thought he had the same sensation, but not so strongly as Fred. They appealed to the Doctor, who said that the feeling was mostly imaginary, and grew out of the knowledge that they were crossing the equator. "But there is sometimes a condition of the atmosphere," he added, "which produces the appearance you describe. In all the time I have passed at sea I have seen it only on a few occasions—perhaps three or four in all. There is a suggestion of it at this moment, I observe, and your imagination has done the rest.

"And you may consider yourself fortunate," he continued, "that you are not making an old-fashioned voyage of twenty or thirty years ago."

"Why so?" Frank asked.

"Because," was the reply, "you would run the risk of an introduction to Father Neptune."

"I remember," said Fred, "that is the ceremony they talk about in crossing the line for the first time."

"Yes," Frank responded, "they play all kinds of pranks on the greenhorns, or those who have never been beyond the equator."

"My first crossing of the line was on an English ship," said the Doctor, and the custom was allowed in its full force. They fastened below all of the crew who were not old sailors, and also all of the passengers. The latter were let off by paying half a sovereign each, to be expended in drink for the crew; three-fourths of them complied at once, and were let up to see the fun. But the greenhorns of the crew were not excused, and we had a chance to see how the ceremony was performed."

"And how was it?"

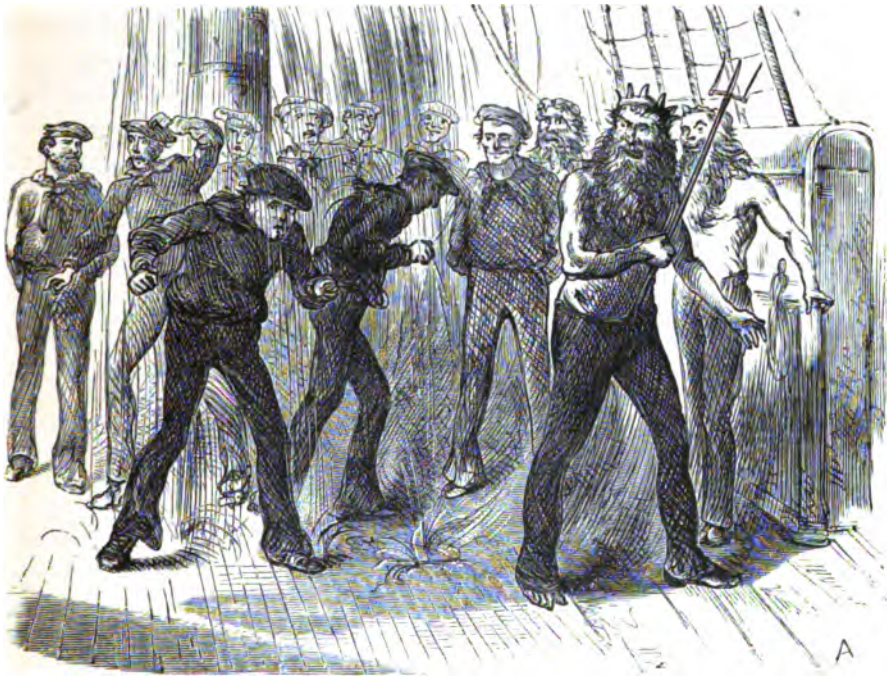
"Just about daybreak the ship was hailed by a hoarse voice that seemed to come from under the bows. The voice was followed by Neptune in person, and he was accompanied by several attendants blowing conch shells. Neptune was one of the old sailors in disguise; he had a long beard made of rope-yarn, and a tin crown, and he carried a trident in his right hand as he marched along the deck. His attendants were

equipped with beards almost as long as those of Neptune, and, like their master, they were naked to the waist.

"He ordered the sailors to bring him a throne, and he was speedily mounted on the top of a cask. Then, one after another, the greenhorns were brought before him to be questioned and shaved.

"Do you intend to serve me always, and be a good sailor?" was the first question that Neptune addressed to the subject before him.

"As the man opened his mouth to answer, the shaving-brush was thrust into it. The brush was a swab made of yarn, and the lather consisted of coarse soap mixed with water from the tub where the grindstone



CROSSING THE LINE ON A MAN-OF-WAR.

stood. The shaving was performed with a rusty iron hoop, and without any tenderness or delicacy. The victims were made to go through the performance in spite of their struggles, and when it was over the majority of them found their faces covered with scratches that lasted for several days.

"The ceremony very rarely takes place nowadays on merchant-ships, and only occasionally on men-of-war. No rudeness is now allowed on the part of Neptune and his assistants, and the sport is confined to drenching

the greenhorns by getting them under a sail filled with water, or playing some other harmless prank. Generally all the officers come on deck to meet Neptune on his arrival, and there is a partial relaxation of discipline for half an hour or so."

The subject was dropped, and the boys devoted themselves to studying the appearance of the water, and the varying light and shadow on the Sumatran coast, which was constantly in sight. Suddenly Frank said he had thought of something he wished to ask the Doctor.

His question had reference to the Malay pirates, of which he had often read, and he wished to know if he was not in the vicinity of those disagreeable men.

"We are in their neighborhood," said the Doctor; "but I don't think we need fear anything from them."

"Of course not," cried Fred; "they would never disturb a steamer like this."

"Not unless she was disabled, and in their power," responded Frank; "and then, I suppose, they would not show much mercy."

"As to that," remarked the Doctor, "it is difficult to lay down an invariable rule. The pirates pursue their trade for love of gain, and are not likely to rush to destruction. If they should get in the way of this vessel she would be likely to run their boats down, and that would be an end of them. They have a wholesome fear of a steamer, and are careful to keep out of her way."

"Twenty or thirty years ago there were a great many pirates all through the Malay Archipelago. They carried on their business as an American would deal in wheat or conduct a hotel, and there were whole towns and villages entirely supported by piracy. They attacked Chinese or other native boats, and they also overpowered European ships that were becalmed in the straits between the numerous islands. The crews were murdered, or sold into slavery in many instances, while in others they were released after much suffering. The evil became so great that some of the civilized nations sent ships of war to destroy the villages where the pirates had their resorts, and also to capture the pirate craft."

"Against a sailing ship the pirates have a great advantage. Their proas, or boats, have a large number of men to row them, and when a ship is becalmed they can come out to her in strong force and rush upon her. They board the ship on both bows simultaneously by dozens and dozens, and in a few moments the crew is overpowered, and the vessel in their hands."

"One of the war-ships that came here was disguised as a merchant

vessel, and she made so many captures that for some time the pirates were afraid to go near a vessel of her rig. An American ship was captured by some pirates from Qualla Battu, a town on the west coast of Sumatra, and the government of the United States sent a ship to teach the fellows a lesson. Qualla Battu was burnt, and the inhabitants that were not killed by the shells from the ship were scattered in the forest. The result was that for a long time afterwards no American ship was troubled by them.

"Singapore was formerly a business centre for the pirates, even after it went into the hands of the English. They swarmed among the channels of the islands in the vicinity, and they had spies in the fort to tell them of the movements of every craft that sailed from it. Their principal victims were the native traders, who could offer little resistance, and they used to conduct the business in the most systematic manner."

"How was that?"

"A chief of one of the small provinces or districts of the Malay States would make up his mind to embark in piracy as a regular business. He would gather as many men under his banner as he could get together, and go to one of the islands near Singapore. There he built a village, which could serve as a depot for slaves and merchandise, and a convenient resting-place for his men, when they had had a hard week's work. Then he stationed himself in one of the channels, where native traders pass on their way to and from Singapore; and very often he would know exactly when one of them was expected. Where he was successful, the chief would soon have a large fleet, sometimes hundreds of proas; and he gathered around him a great number of adventurers, who were proud to range themselves under his banners. His forces would become so large that he could divide them, and watch several channels; and sometimes it happened that serious troubles arose between rival pirates for the possession of some place that was particularly valuable for purposes of plunder.

"The ships they captured were taken to their settlements by the pirates; and after all the goods in them had been removed, the craft and its cordage would be burnt, to prevent identification. The plunder would be sent to Singapore in the chief's trading-vessels, and sold in the open market; and it often happened that a merchant who had sold goods to a native trader living far to the south was able to buy them back again, in a week or two, at a greatly reduced rate.

"The native crews of the captured ships were taken to some of the interior towns of Sumatra or Borneo, where they were sold as slaves to



CHIEF'S HOUSE IN A PIRATE VILLAGE.

work on the pepper plantations belonging to the Malays. The pirates generally sailed in fleets of from four up to thirty proas, according to the class of ships they were looking for. Each proa carried from twenty to forty men, and had one or more small guns, in addition to muskets and pistols. Their favorite weapons were the Malay kriss or knife; and they had a supply of darts and other missiles, to be thrown on board their intended prizes.

"They always boarded over the bows, and they rushed on in such numbers that the small crew of a merchant-ship could offer no resistance. Once they met their match at the hands of a woman, and the fame of her stratagem lasts to this day."

"Oh! please tell us about it," said both the boys.

"She was a Quakeress," the Doctor replied; "and you know the Quakers do not believe in fighting."

"She and her husband were passengers on a brig that was becalmed in one of the straits of the Malay Archipelago. A dozen proas came out from a little harbor where there was a pirate settlement, and paddled straight towards the brig. The crew began preparations for defence, and



the captain called on the husband of this woman to perform his share of the work. He refused, on the ground that fighting was contrary to his religious principles; and his wife sustained the refusal.

“‘But, if he cannot fight,’ said she, ‘he and I will do something for the general good of all on the ship.’

“She told her husband to bring on deck some dozens of beer bottles that had been emptied of their contents during the voyage. Then, with a hammer, she set to work to break these bottles into small pieces, which were scattered all over the deck. Her husband assisted her, and so did the crew, and, before the proas were along-side, the whole deck, from bow to stern, was covered with the bits of glass.

“The proas came up, and the pirates swarmed in over the bows, after their usual custom. These fellows are half-naked, and always barefooted—the rest of the story will almost tell itself.”

“I think so,” Frank responded. “The pirates trod on the fragments of glass, and cut their feet so that they could not stand. The crew and passengers were at the stern of the brig with their shoes on, and had nothing to do, as the glass did all the fighting for them.”



HARBOR OF PIRATES.

"That was about the way of it," said the Doctor. "The pirates nearly all came on board, but not one of them was able to get aft to where the crew stood. The deck was covered with Malays with lacer-



THE PIRATES' VICTIM.

ated feet, and they were so helpless that the captain directed his men to pay no attention to them, but to shoot the men in the proas. They were shot down accordingly, and only a few of the rascals escaped. Those who

were left saw that something was wrong, and so they pulled away to the shore for aid.

"They had not gone far before a breeze sprung up, the sails filled, and the brig began to move through the water. The breeze increased; and, before re-enforcements could come from the shore to aid the pirates, the brig was out of all danger."

"And what became of the pirates that were left on the deck of the brig?" Fred inquired.

"The captain had no use for them," the Doctor answered, "and so he dropped them overboard after sailing a few miles. The occurrence was a discouraging one to the pirates in that region, and for a long time afterwards they were very cautious about setting their bare feet on the deck of a foreign ship.

"There is very little piracy nowadays," the Doctor continued, "compared to what there was a quarter of a century ago. It is very rarely the case that a foreign ship is captured by the freebooters, or even molested by them. They confine their operations to native traders; but they are compelled to occupy the most secluded retreats, and therefore have little chance to do anything. The construction of steam gun-boats was the practical end of piracy, so far as its bearing upon foreign commerce was concerned; the pirates were pursued to their haunts and destroyed, and the native chiefs were made to understand that they would be held responsible for every unlawful act committed within their jurisdiction. Since the business became not only unprofitable but hazardous to the necks of those in authority, very little has been heard of it."



SINEWS OF WAR.

## CHAPTER XXIV.

## SUMATRA AND ITS PECULIARITIES.—SNAKES AND ORANG-OUTANGS.

THE boys had observed, as they journeyed to the southward, that the North Star declined lower and lower in the heavens in proportion as they receded from the Pole. At Singapore it was only a little way above the horizon, and after they passed the equator it disappeared altogether. From Singapore they had seen the Southern Cross, which is to the South what the Great Bear is to the North.

Frank made a note of this fact, and the first night they were beyond the equator they sat till a late hour on deck to study the appearance of the heavens. When they first began their observations they could not see The Cross, and Fred went to ask the Doctor the reason of its disappearance.

"It is not yet above the horizon," said the Doctor, "and will not be there till after midnight."

"How is that?"

"The Southern Cross is not over the South Pole, but about ten degrees from it. Therefore, when we are so near the equator as we are now, the Cross goes at times below the horizon. You must wait till late at night before you can see it."

They concluded to go to bed, and let the new constellation remain undisturbed where it was. As they were going still farther south, they would have abundant opportunity to see it before their return to Singapore.

The second day of their voyage they had the coast of Sumatra still in sight for a large part of the time, and the boys wished they could make a landing there and see something of the country. Among the passengers there was a gentleman who had been in Sumatra, and he kindly undertook to tell the boys something about the island and its people.

He began by asking if either of the youths could tell him what the geographies said about the island, and its extent and characteristics.

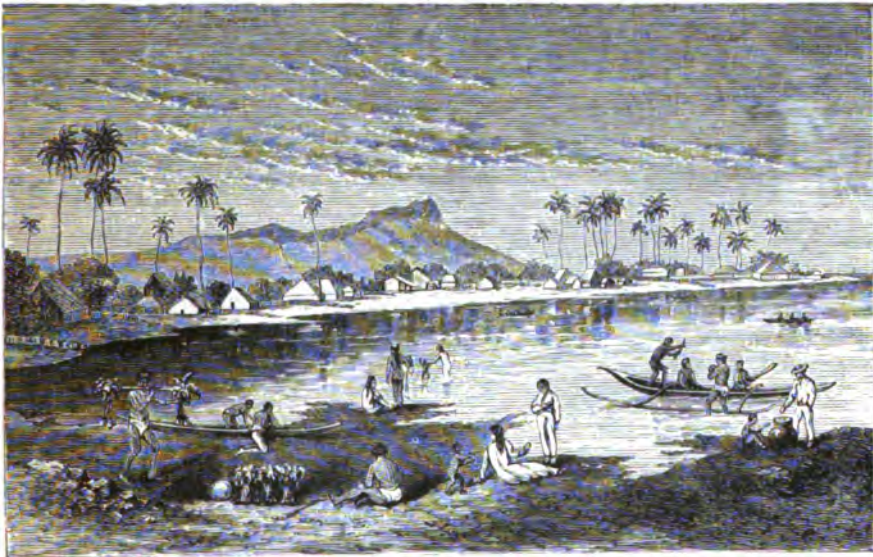
"Certainly," Frank replied. "We know that it is about one thousand



miles long by two hundred and fifty wide, and has about five million inhabitants. The Dutch have a part of it in their possession, and the rest is independent; but perhaps the Dutch will have the whole of it one of these days."

"Why do you say that?"

"Because the Dutch have been at war for some time with the native government of the province called Acheen. At any rate I have read so; and I have also read that when they succeed in capturing it they will have more than three-fourths of the island under their control."



A TRADING-STATION ON THE COAST.

"You are quite correct, I believe," said the gentleman; "but the Acheen war may yet last a long time. The natives are brave, and the country is very unhealthy for the Dutch. Fevers have killed more than the enemy's weapons since the Dutch went there, and the conquest will be a very costly one. But we will not trouble ourselves at present about the Acheen war, as it is rarely heard of in America, or, for that matter, in Europe.

"The Dutch possessions include Padang and Bencoolen, on the west coast of Sumatra; Lampong, on the southern end of the island; and Palembang, on the east coast. Banca and some other islands of lesser size lie near the coast of Sumatra; but they form separate governments, and are not to be considered as belonging to the great island we are discuss-



ing. Banca is famous for its mines of tin, which have been worked for a long time, and are the source of a large revenue. There are many good



A BAYOU ON THE PALEMBANG RIVER.

harbors on the coast, and there are two or three of them that can hardly be surpassed anywhere. On most of these harbors there are cities, and a considerable business is done in products of the tropics, such as rice, pepper, ginger, turmeric, spices, and camphor and other gums.

"The only place in Sumatra I have visited," said the gentleman, "is Palembang. The city is quite large, and is on a river of the same name; to go to it you must ascend this river about a hundred miles, through a country that is low and rather swampy. The foliage is luxuriant, and there are numerous little bayous leading off from the river; so that you must have a good guide, or run the risk at times of losing your way.

"I went there in the rainy season, when much of the country was flooded. The city is built on the river, and extends three or four miles along a bend in the stream; so many of the houses are on floating rafts, that rise and fall with the tide, that it makes little difference to the inhabitants whether the river is high or low. If you have been in Siam you can form a very good picture of Palembang, as it is much like Bang-

kok in the number and arrangement of its floating houses. When you go to market, you go in a small boat, just as you do in Bangkok, and nearly everything is transported by water.

"It is a peculiarity of the Malays never to build a house on solid ground if they can find a place to stand it on piles in the water, and they prefer a boat to any other kind of a conveyance. At Palembang the most of the Malay inhabitants are thus located; but there are many Arab and Chinese residents who have their houses on the solid ground. Most of the trading is in the hands of these foreigners, and there are very few European inhabitants besides the officials who represent the Dutch government. They are very glad to have strangers come there, as it is a change from the monotony of their every-day life; and if you should happen to visit Palembang you may be sure of a kindly reception.

"The country is quite low and swampy all around Palembang, though the town itself is on a slight elevation that preserves it from overflowing. You must go twenty or thirty miles farther up the river to the firm coun-



ARAB HOUSES AT PALEMBANG.

try, and there you find the commencement of the tropical forests for which Sumatra is famous."

Fred asked what kind of trees are to be found in these forests.

"As to that," was the reply, "the trees are not much unlike what you have seen in Malacca and Siam. They have several varieties of the palm, and they have rubber-trees from which they derive a good revenue. The mango-tree, with its broad branches and dark foliage, is frequently



LOUNGING UNDER A MANGO-TREE.

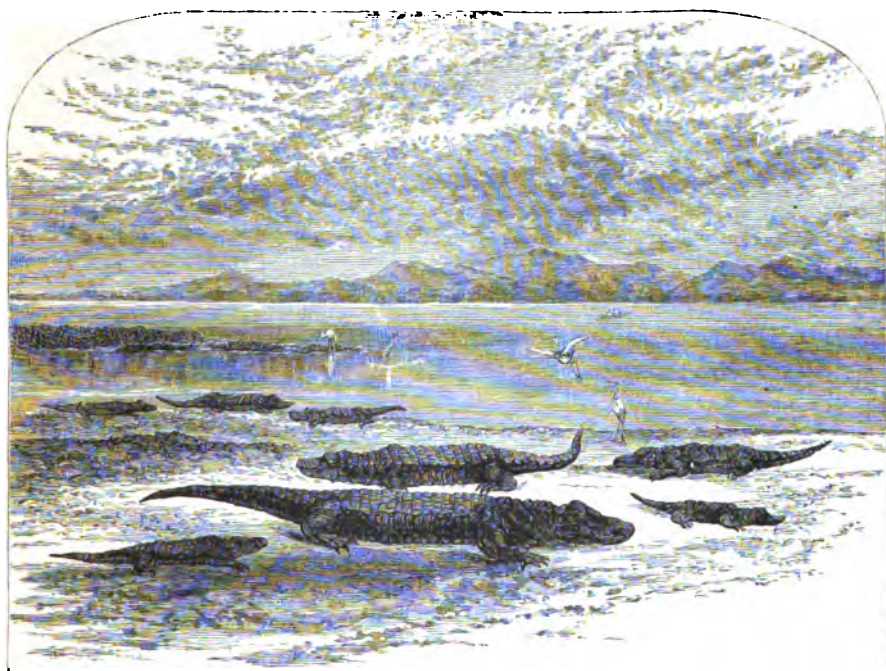
seen, and it is a favorite in the neighborhood of the villages. The natives like to swing their hammocks beneath it; and, for my own part, I do not know a better place to lounge in, in a hot afternoon, than the shade of a mango-tree.

"Being under the equator, Sumatra is a hot country, and one must be cautious about exposure to the sun. During the middle of the day you should remain at rest, and you will find great refreshment in bathing frequently; but take care how you plunge in the rivers, as many of them are full of alligators, and sometimes these brutes are hungry. Occasionally you may see dozens of them lying on the banks to enjoy the sun, and they are hunted so little that you may come quite near without disturbing them. At a little distance they look like logs, and you might easily mistake their black bodies for sticks of timber that have been par-



tially burnt. There is one island just above Palembang where they swarm in large numbers, and are of all sizes, from very small to very large. The island also abounds in cranes; and sometimes they approach near enough to the alligators to come within reach of the powerful tails of those reptiles. In such a case there is a single sweep of the great lever, and the whole business is over.

"Since the Dutch went to Sumatra they have constructed roads, and done a great deal for the improvement of the condition of the people. The roads are divided into regular stages of ten or twelve miles, and if you send on in advance you will find everything ready on your arrival, so that you will not be delayed; but if you do not give notice beforehand, you can only go the distance of one stage in a day, which makes your progress very slow. At nearly every station there is a village; and if you



ALLIGATORS TAKING SUN AND AIR.

want to study the habits of the people, you can do so very well by walking from one station to the next in the morning, and then strolling about the village and neighboring regions in the afternoon. There is always a house for strangers, and you have nothing to do but walk in and take possession: you pay for what you have at a fixed rate. The Dutch have

been careful to adjust the prices of everything, so that there can be no dispute.

“Away from the rivers the houses of the natives are on poles or posts, just as they are when built in the water. The best of them are of boards or planks, and the more common ones of bamboo, and the floors are covered with mats, on which you may sit or lie. They have no beds, benches, or chairs; even in the houses of the chiefs you will see hardly a single article of furniture.

“There is a great similarity among the Sumatran villages. A village



VIEW IN A SUMATRAN VILLAGE.

covers several acres, and is almost always surrounded by a high fence, to keep out the wild animals that abound in the island. The houses are dropped down higgledy-piggledy without the least attempt at regularity, and there is generally quite a grove of palm, banana, and other trees around them. The best of the dwellings have their ends ornamented with some elaborate carving in wood, and the ends of the roof rise in a graceful curve that terminates in a point.

“There is a curious combination of neatness and the reverse in the habits of the people of these interior villages. The ground is hard and clean, and the houses are frequently swept with the greatest care; but they have no system of drainage, and the only way of disposing of refuse of any kind is to throw it into a sink-hole under the house. The people seem to have adhered to the custom that prevails where their houses are built over the water, and the result is that your nose will often inform you, before your eyes do, that you are approaching a village.”



Frank asked what birds or beasts were to be found in Sumatra.

"You find pretty much the same as you do in Malacca or Siam," was the reply. "There are plenty of elephants of the same species as on the main-land, and there is any number of tigers. They are very large, and proportionally fierce, and a great many of the natives are eaten by them every year. They do not often attack white men, but I had a close escape one evening from being eaten by one of them."

"How did that happen?"

"I had been visiting a planter of my acquaintance, and we did not separate till about dark. I had a ride of six or eight miles before me to reach the house where I was to stay for the night, but did not mind it in the least, as I had been over the ground before, and had no fear of losing my way. My friend cautioned me to look out for tigers, but I only laughed when he said so, as I had no idea that a tiger would attack a man on horseback.

"I was cantering gently along, when all at once my pony began to prick his ears and sniff the air, as though all was not right. Every moment he was more and more uneasy, and he exerted himself to the utmost



CHASED BY A TIGER.

to make good time over the road. Never in my life was I carried faster by a horse than on that occasion.

"In a few minutes I heard the growl of a tiger, who was in full pursuit, and gaining at every stride. The road led to a creek, and it occurred

to me that my whole safety consisted in reaching that creek before the tiger reached me. I threw my hat off to amuse the beast for a moment, and it gave my horse just the time he needed without a second to spare. The tiger did not try to follow through the water, and when I got to the house where I was to stay, I resolved not to venture again on that road after dark.

"Some of my friends were unkind enough to say that perhaps I was mistaken in the whole matter, and that the horse took fright at a thorn catching under the saddle-girth as we went through the jungle; so the next morning I invited one of them to go with me to the creek, and to the spot where I threw away my hat. The fragments of the hat were there, where the tiger had torn it in his rage, and the tracks of the beast were visible in the soft earth. From the extent of his foot-prints he was evidently of the largest size, and would have made short work of a man

when once he had settled his teeth into his throat. It was the narrowest escape I ever had in my life. I have been treed by a bear, but the sensation was nothing compared to that of being chased by a tiger."

"Please tell us," said Fred, "how you happened to be treed by a bear."

"Certainly," said the gentleman; "but the story has nothing to do with Sumatra or any other island of the Malay Archipelago. It was in America that the incident happened.

"I was out hunting one afternoon, and had only a small fowling-piece loaded with bird-shot. Suddenly I came across a black bear, and very foolishly fired at him. The shot enraged him, and he ran for me.

"I ran a few yards, and knew that every moment he was gaining on me. I dropped my gun, and sprung for the nearest tree; I was young and active, and went up several feet at the first bound. It was a smooth sapling, with the lower part



TREED BY A BEAR.

quite free from limbs, and I soon found that it was no easy matter to climb after the first spurt was over. The bear followed me, and had



SHOOTING A BOA-CONSTRICTOR.

the advantage of claws; and he came on faster than was agreeable. I knew that a friend of mine was not far off, and I shouted with all the power of my lungs. He heard me, and came to my relief; and, just as the bear had taken me by the coat-tail, I heard a shot, and the beast tumbled to the ground. I don't like bear-hunting in that shape."

Fred inquired if there were any snakes in Sumatra.

"Yes, snakes in abundance," was the response; "and they sometimes grow to an enormous size. In some respects, Sumatra is the paradise of snakes, as they have a hot climate, and can always find plenty to eat."

"What kind of snakes do they have there?" queried Fred.

"The largest is the boa-constrictor," said the gentleman; "and I do not believe he grows to a greater size in any other part of the world."

"What is the greatest length you have ever known for one of these snakes?" Frank asked.

"The longest I ever saw was one that I killed myself. I was out hunting, and had three or four natives to carry my gun and other things, when suddenly one of them shouted, and pointed to a tree.

"I looked, and saw an enormous snake coiled up there, with his head over a limb, and evidently watching us as we approached.

"Du Chaillu and other hunters of experience say that the best thing for shooting a snake is not a bullet, but a charge of small shot, such as we use in duck-hunting. So I gave my rifle to one of the natives, and called for my fowling-piece.

"I managed to get around in order to have a good aim, and ventured so close to the snake that the natives warned me to be careful. I watched my chance, and just as the fellow darted his head forward I fired.

"My aim was accurate, and the snake's head was blown into a shapeless mass. He threw himself from the tree, and writhed on the ground, while I retired with my party to a safe distance. We watched him twisting his body into many shapes, and tearing up the small trees and bushes as he wound around them. In about an hour I continued my hunt, leaving one of the natives to watch the snake, so that we could skin him when he was done writhing.

"Wishing to explore a small creek, I sent another of the men to bring



A SNAKY CREEK.

a boat; and he soon returned with it. It must have been a great day for snakes, as we had not gone far before the water seemed to be alive with them. They were of all the colors of the rainbow; and some of them had shades that the rainbow never possessed. The largest I should judge to have been eight or ten feet in length, but I had no opportunity to measure him.

"One tried to get into the boat, and I shot him just as he raised his

head over the bow; others swum close to the boat, and seemed in no hurry to get out of our way. There was a large boa, or python, coiled around a tree that overhung a bank; he darted his head rather defiantly, but made no other demonstration. I was quite willing to let him alone, provided he would be equally polite to me; and, as he manifested no intention of attacking us, I did not fire on him.

"We went back late in the afternoon, and found that our great boa had ceased his twistings, and was sufficiently quiet to be skinned. He measured thirty feet and a few inches in length, and was certainly one of the largest of his kind. He could kill and eat an ordinary-sized cow



• MONKEY EXAMINING A TORTOISE.

or bullock; and, as for a dog or monkey, he would dispose of one without the slightest trouble. The favorite food of this snake is the monkey; and he captures him by lying concealed among the trees, and waiting patiently till the monkey comes within his reach."

"Then there are monkeys in Sumatra?" said one of the boys.

"Certainly," was the reply, "there are monkeys in abundance. The naturalists have found no less than eleven distinct species of the monkey family, and it is thought there are several yet undiscovered in the forests. There is one monkey called the *simiang*, that has tremendously long arms; Mr. Wallace measured one that was only three feet high, but his arms were five and a half feet when stretched out. This monkey will swing himself from one tree to another with the utmost ease, over distances that most of the other monkeys would hardly venture to go."

"Do they find the variety of monkey known as the orang-outang in Sumatra?" one of the boys asked.



"Yes," said their informer, "the animal is found only in Sumatra and Borneo, but he is rarely seen on the first-named island. In parts of Borneo he is quite abundant; and the most of the specimens in the museums all over the world came from that wild region."

Frank asked how large was the largest of these beasts that had been captured and measured.

"As to that," said the gentleman, "there is a considerable conflict of testimony. Mr. Wallace says that the largest killed by him during his stay in Borneo was four feet two inches from head to heel; and his outstretched arms were seven feet nine inches from tip to tip of his fingers. The face was thirteen inches wide, and the body measured forty-three inches around. Mr. Wallace further says that he measured seventeen freshly-killed oranges, and the skeletons of two others; sixteen were full-grown adults—nine males and seven females. The males varied from four feet one inch to four feet two inches in height; and the outstretched



FEMALE ORANG-OUTANG.

(From a Photograph.)

arms from seven feet two inches to seven feet eight inches. The measurements of other naturalists closely agree with his, and he therefore concludes that the stories of oranges exceeding five feet in height are extremely doubtful.

"The natives say the orang is king of the forest, and the only animals that venture to attack it are the crocodile and the python. They



NATIVES OF BORNEO FIGHTING WITH AN ORANG-OUTANG.

only do so on rare occasions, and are apt to get the worst of the battle whenever they provoke it. One of the native chiefs says that when food is scarce in the forest, the orang goes to the banks of the streams to feed on the lilies, and in such cases he is sometimes attacked by the crocodile. His arms are so strong that he has been known to pull the crocodile's

jaws open, and rip up his throat; the chief claims to have witnessed such a fight, which occurred on the bank of a stream, and was won in a short time by the orang.

"The same chief said that the python found his match in the orang—the latter biting the python's throat, and tearing him with his powerful claws. The natives have a great dread of the orang, unless they have the advantage of fire-arms; they sometimes attack him with their spears and hatchets, but they do so with reluctance, as some of them are apt to be severely wounded, if not killed outright, in the encounter."

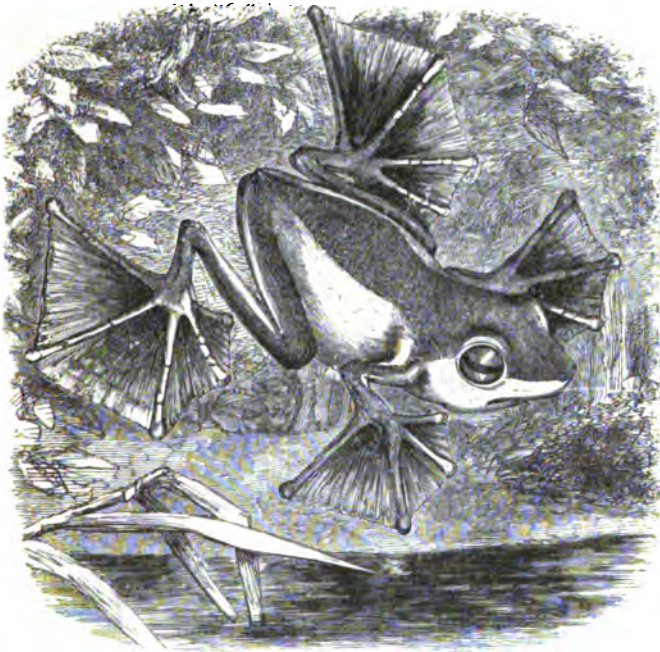
Fred wanted to know if the animal they were discussing was in the habit of walking erect like a man, as he had seen represented in pictures.

"The best authorities say he does not," was the reply; "and I think that such pictures as you mention are far more imaginary than real. He spends nearly all his time in the trees, and when he goes through the forest he moves from one tree to another by following the limbs that interlace. He feeds in the trees in the daytime, and sleeps there at night; his bed is composed of leaves gathered together in the fork of a tree, and he never remains long in one spot. The natives say he finds a new resting-place and makes a new bed every night; but there is some doubt as to the correctness of this theory. When he has been wounded, and feels faint from loss of blood, he will gather a quantity of leaves and form a bed, where he lies down and dies. In such a case the tree must be cut down to get his body, as no amount of shaking will dislodge it; or the natives must be hired to climb up and remove it. This they will not do readily, as the animal has great vitality, and has been known to spring up suddenly and do a great deal of damage after he was supposed to be dead."

"There are some other curious products of this tropical region," said the narrator, "which I will endeavor to describe briefly. There is a frog that flies through the air, and—"

"How funny!" Fred exclaimed. "A flying-frog! He ought to be a relative of the fish that climbs a tree, and travels on dry land."

"Whether he is a relative or not of that fish, I am unable to say," was the reply, "but that he exists there is no doubt. He comes down from the top of a high tree to the ground in a slanting direction, just as you have seen a flying-squirrel go from one tree to another. His toes are very long, and webbed to their extremities. The body of the frog is about four inches long, and when spread out the webs of his feet have a square surface of at least twelve inches. This is much more than he



A FLYING-FROG.

needs for swimming, and we must, therefore, conclude that Nature has thus equipped him so that he can fly through the air.

"There are many varieties of butterflies in Sumatra, and some of them are very beautiful. All the tropical islands abound in butterflies, that arouse the enthusiasm of the naturalist by the brilliancy of their colors and the great size they attain. There are numerous birds, especially of the parrot family, and sometimes you will see hundreds of them in a walk of an hour or more through the forests where they live. The parrot is inclined to be sociable, and likes his fellow-parrots; you will rarely see one of these birds quite alone, and when you do, you may conclude that the occurrence is an accidental one.

"Among the habits of birds there is none more singular than that of the Sumatran hornbill."

"What is that?" Frank inquired.

"The hornbill, whose scientific name is *Buceros bicornis*, makes its nest in a hole in a tree. When the female has laid an egg, the male plasters up the entrance of the hole with mud, and keeps his mate there until the young bird has been reared to the proper age for coming out in the world."

"How does she manage to live all that time?" said one of the boys.

"The hole is not entirely closed," was the reply. "A small opening is left, and through it the male bird feeds her, and he is constantly on duty around the outside of the nest to protect her from harm. When the young bird begins to eat, the mother takes in her beak the food which her mate has brought, and gives the youth his proper allowance. He is a funny-looking fellow when about half grown; his body is plump and soft, without a single feather, and his skin is half transparent, so that you almost expect to see through it."

"A remarkable bird," said Fred.

"And a remarkable country he lives in," Frank replied.

And with this comment the conversation about Sumatra and its products came to an end, with a vote of thanks on the part of the boys to their amiable informant.



A SUMATRAN BUTTERFLY.



## CHAPTER XXV.

## ARRIVAL IN JAVA.—SIGHTS AND SCENES IN BATAVIA.

AT daylight the next morning the boys were on deck for their first sight of Java. They could see nothing but a low coast, like that of Siam, with a fringe of tropical trees, and a backing of mountains in the distance. They had expected to go into a snug harbor, but found that the harbor of Batavia is more imaginary than real, as it is little better than a shallow roadstead, where ships of deep draught must anchor far from shore.

The steamer came to her resting-place, and the anchor went plunging down to its muddy bed. A noisy little steam-launch came to carry the mails ashore, but our friends were not allowed to take passage in her; they were told there would be a steamer for the passengers in an hour or two, or, if they preferred, they could go ashore on a native boat.

They chose the latter conveyance, as the time of waiting for the steamboat was a trifle uncertain; and, besides, they desired to get to land as speedily as possible. There were a dozen boats hovering around the steamer, and it did not take long to make a bargain; for three florins—a Dutch florin is equal to forty cents of our money—they were to be carried to the “Boom,” or custom-house, where their baggage would be examined, and they could find conveyance to the hotel. As soon as the bargain was made their baggage was lowered into the boat, and they were off.

It was a long pull, and the sun was hot. Our friends reclined under their umbrellas, and tried to be comfortable; and the boys wondered how the boatmen could pull away so cheerily and not be fatigued. The Doctor reminded them that the men had been accustomed all their lives to the climate of Java; and what seemed very severe to strangers from the North was nothing to those who were used to it. The men evidently understood the subject of conversation, as they offered to pull twice as fast for another florin; their proposal was declined, as none of the new-comers wished to be the cause, however indirectly, of a sunstroke among the natives.

It was a journey of three miles from the steamer to the custom-house, partly in the harbor and partly in a canal. The canal is pushed out a



ARRIVAL IN PORT.

considerable distance into the harbor by means of stone dikes; and the space between these dikes is dredged to a depth of twelve or fourteen feet. Nothing but small craft can come up to the docks; heavy sea-going ships, whether steam or sail, must anchor in the harbor, and their cargoes are transferred by lighters.

As soon as they reached the end of the wall that forms the canal the boatmen drew up against it, and for the rest of the way the boat was towed, or "trecked." This mode of propulsion was easier and faster than rowing, and partly accounted for the proposal of the boatmen to double their speed, as they were near the end of their rowing when they suggested it. At the custom-house the trunks and valises were subjected to a slight examination; there was a polite official who spoke English; and on learning that our friends had only come for a brief visit to Java, and had no business to transact, he assured them that all was right. He asked for their passports, and said it would be necessary to get a permit

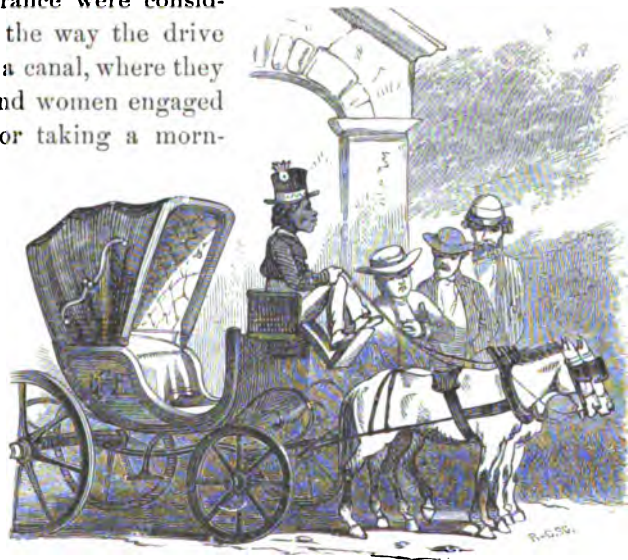
to remain on the island, especially if they wished to travel in the interior. This they could easily do, he said, through their consul; and then he informed them that the formalities of the custom-house were ended.

A runner was there from the hotel they intended to patronize, and so they gave their property into his hands. It was piled on a cart and sent off, and then the runner led the way to a carriage that was standing near. It was a sort of Victoria, that could accommodate two persons comfortably; and there was an extra seat just behind the driver, which could be turned down and made to hold a third passenger in an emergency. The horses were diminutive beasts, with harnesses in the European style; and the driver was a withered specimen of a Javanese, wearing an ancient hat decorated with a cockade, and having the brim turned so that it would not impede the view in any direction. Fred thought the hat had come from Holland about the middle of the century, after doing duty in a respectable family of Amsterdam for at least a dozen years. Frank remarked that the hat was hardly less antique than the head it covered; and the skin of the one seemed as much glazed as the other.

It was nearly, if not quite, three miles from the custom-house to the hotel, and the little horses went over the ground at a surprising rate, when their size and appearance were considered.

For much of the way the drive followed the bank of a canal, where they saw groups of men and women engaged in washing clothes or taking a morning bath. Batavia is on level ground, the same as Amsterdam; and the Dutch have tried to make it seem as much like home as possible by supplying it with canals. They have carried many of their customs with them in emigrating to the East, and sometimes to their disadvantage.

For instance, they adhere with unflinching firmness to the old practice of taking a glass of *schnapps* before every meal, forgetting that



THE CARRIAGE AT THE CUSTOM-HOUSE.

what may be allowable in a cold country is the reverse of beneficial in a hot one. Our friends reached the hotel a little while before the mid-day meal was served, and they were hardly inside the door of their rooms before a servant came with glasses of a fiery liquid to enable them to get up an appetite. He was somewhat surprised when they declined what was considered so necessary to the health.

The hotel covered an immense area, as it consisted of a series of bungalows of one story, with a central building, where the dining-room and the offices of the manager were located. Between the rows of bungalows



THE NATIONAL TASTE.

there were shade-trees and paved walks, and along the front of each house there was a wide veranda, where the occupants could sit or recline in the open air whenever they chose to do so. The central building was two stories high; all the lower part was taken up for the dining-room and parlors, while the upper floor was occupied by patrons. Our friends were assigned to rooms in one of the bungalows, and a barefooted servant came to assist them in arranging their effects, and bring whatever they desired.

The servant was of a type new to our friends, and Frank proceeded to make a sketch of him at the first opportunity. He was a Javaneese

Malay, with features not unlike those of the Malays of Singapore, but his dress was different. He wore trousers of striped cotton, rather narrow in the legs, and without any nicety of fit; above the trousers he had a gaudy shirt, with an embroidered front, and a short jacket of material similar to that of the trousers. Wrapped around his waist, and falling to the knee, he had a skirt that appeared to have been cut from the gayest piece of calico that ever came from the looms of Manchester or Lowell; and it was held in place by a belt. This part of the Malay wardrobe is called a *sarong*, and is worn by both sexes; it is usually fastened by tying a knot in one corner, and then drawing the sarong tightly around the waist. The knot is passed under the straightened edge of the garment, and is not likely to slip out of place.

Accompanying this servant there was a small boy whose business it was to bring cigars, and fire for lighting them. It seemed to Frank and Fred that the Dutchmen of Batavia were smoking all the time; and Fred suggested that, if the days were twice as long, there would be exactly twice as much smoking.

Breakfast was served in the large room we have mentioned, and Doctor Bronson and the boys were shown to the seats assigned to them. Frank made a discovery that amused him greatly, and was equally entertaining to his cousin when he learned of it. It was so unlike the custom of any hotel he had ever seen, that he made a note of it to include in his next letter. Here it is:

"The three of us have one servant; and, as far as I can see, he waits on no one else. In each of our rooms there is a little closet, and in this closet there are knives, forks, spoons, plates, etc., for one person. Before breakfast or dinner our servant takes these things to the general table, and when the meal is over he brings them back again, and returns them to their places in the closets. He is responsible for breakage, and is required to keep the articles clean. The only dishes that go to the kitchen of the hotel are the platters, tureens, and similar things, on which the food is brought from the place of cooking."



THEIR SERVANT.



Fred was busy with his eyes and ears during breakfast, and contributed to the general fund of information as follows:

"The first solid meal of the day in Batavia is called the *ryst-taffel*, or rice-table. It is served about eleven o'clock; and its name goes far to describe its character, as it consists largely of rice. This is the way they serve it:



THE MANGO.

"The rice is boiled in such a way that each grain is separate from every other. It is served hot in a large dish, and you help yourself into a soup-plate of goodly size.

"One servant hands you the rice, and when you have filled your plate with it another servant offers you a round platter or tray, eighteen or twenty inches across, and divided into a dozen compartments. These compartments contain various seasonings, and you may take any or all, or none of them, at your pleasure, and in quantities to suit you. You have chutney, which is a sharp sauce from India; you have red or green peppers, cut into a fine hash, red pepper mixed with water to form a paste, cocoa-nut grated fine, preserved ginger-root, sliced mangoes, English pickles, salt fish dried to a crisp, capers, and other hot and spicy things peculiar to the East.

"When you have taken what you want from the tray, the servant moves on, and another takes his place. He offers you soft eggs, either boiled or poached, and you are expected to take one or two of the eggs to mix with your rice. Then comes a servant with a plate of some kind of meat, cut into small pieces, and stewed with curry-powder; and behind him is another servant with a plate of some kind of vegetable, which has been stewed in curry. Then they offer you cold chicken or ham, or some other meat, to put on a small plate at your side, and your supply of food is completed, with the addition of all the bread you want. You mix all the things you have in your large soup-plate into a thick mass, like yellow paste, and eat with a spoon.

"This is the famous Java curry; and if you have taken plenty of the pepper and chutney, and other hot things, your mouth will burn for half an hour as though you had drunk from a kettle of boiling water. And when you have eaten freely of curry, you don't want any other breakfast. Everybody eats curry here daily, because it is said to be good for the health by keeping the liver active, and preventing fevers.

After breakfast our friends went to their rooms, and soon afterwards met on the veranda to arrange plans for seeing Batavia. Somewhat to their surprise, they learned that it was not fashionable to be seen out till three o'clock in the afternoon, and they must not call on any one during the middle of the day. The Doctor said that the Dutch and other foreign inhabitants of the city were supposed to sleep two or three hours while the sun was high in the heavens; but as they were strangers, and had little time at their disposal, they would get a carriage and take a drive.

Neither ladies nor gentlemen are visible in Batavia between breakfast and three P.M.; or if they show themselves they are not acting according to custom. They lounge in bed or hammock, or in their bamboo arm-chairs, and try to get as much rest as possible to fit them for the fatigues of the evening. It is this habit of sleeping in the daytime that enables the fashionable Batavians to keep



A TRIFLE TOO PEPPERY.



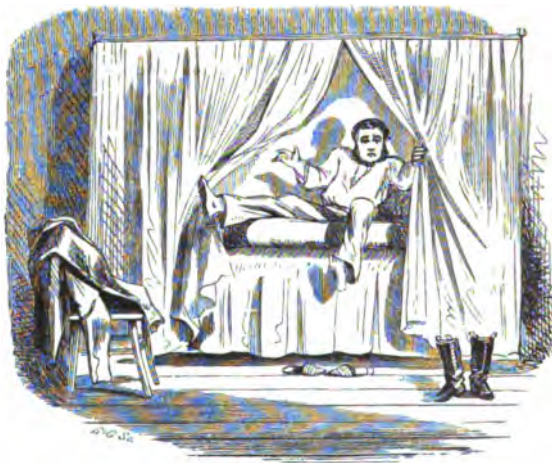
AFTER BREAKFAST.

very late hours. They are accustomed to rise early; and by five o'clock in the morning half the people in the hotel were out of bed, and the rest of them before six.

Frank and Fred were awakened on their first morning in Batavia before they thought the hour of rising had arrived. The Doctor told them they had best conform to the custom, and so they crept from their beds and prepared to dress.

"That is unnecessary," said the Doctor; "it is perfectly proper for you to come out in your sleeping-suits, and sit in front of your rooms, or go to your baths. You will find that is what everybody else is doing."

Accordingly they made their appearance in their pajamas, and found that the servant was ready to attend upon them. All around they could hear men calling "*api!*" "*api!*" and they naturally asked what "*api*" meant.



AN EARLY CALL.

"It is the Malay word for 'light' or 'fire,'" said the Doctor; "and the call you hear is for a light for a cigar or cigarette."

When they went to the row of bath-rooms fronting their apartments, the boys looked for bathing-tubs, but found none. Each bath-room had a faucet whence water could

be drawn, or it contained a barrel and a dipper, but no other furniture.

The bathing custom in Java is to pour water over the body, and not to plunge into a tub. A tub can be had by any one who asks for it; but he runs the risk of being considered a barbarian, who cannot be weaned from the absurd customs of his native land.

After the bath came the "little breakfast," as it is called by the residents, consisting of tea or coffee, with eggs or cold meat, and a few biscuits. When this was ended Doctor Bronson ordered a carriage, and the morning hours were devoted to a drive.

"We have not quite time," said the Doctor, "to exhaust a single course with the carriage between this and the hour for the *rys taffel*."

The boys could not understand his meaning, until he explained that the rules governing the hire of carriages in Batavia are somewhat curious. "The tariff for a Victoria," said he, "is four florins or guilders—about one dollar and sixty cents of our money, and if you only ride a few blocks you must pay that price. But you can, if you choose, keep it for six hours without any extra charge, except that the driver will expect an allowance of an hour or so to rest his horses, and a little money for himself by way of remembrance."

"What an odd arrangement!" said Frank.

Fred agreed with him fully, and probably every traveller who visits Batavia will not be long in coming to the same conclusion.

"When I was here before," continued the Doctor, "I took a carriage one morning for the customary six hours, and went out for a drive. At the end of three hours I returned to the hotel for breakfast, and told the driver he could have an hour to himself and then return. He did not come again, and when I asked at the office of the hotel the manager said he would investigate the affair. In the evening he told me he had seen the driver, and paid him, and his reason for not returning was that his horses were tired.

"I thought no more of the matter till I settled my bill the next day, preparatory to going into the country, and found that the full tariff of four guilders had been charged for the carriage. I protested that the man was not entitled to that amount, because he had not given me the stipulated service. The manager said he had paid the bill because that was the law; and he added that the driver would have served me the full time if his horses had not been tired.

"In vain did I protest that I had been unjustly treated; the only answer I could get from the manager was, 'The driver's horses were tired—his horses were tired.' I vowed that the next time I employed a carriage in Batavia I would adhere rigidly to the law, and keep it in my sight for the full six hours, whether I wanted it or not. If the driver serves us well to-day, perhaps he will get an allowance; but if he is obstinate, as these Malay drivers sometimes are, I shall feel like enforcing the law to the letter."

They were fortunate in finding a very amiable driver, who did his best to make the strangers enjoy their ride. He spoke only the Malay language; but, in spite of the absence of a common tongue, he managed to make them understand his explanations, and to show them a good deal of Batavia. The result was that they gave him an hour to spare, and an extra florin for the trouble he had taken.

Here is what Frank wrote in his note-book concerning their first morning's ride in Batavia :

"Batavia covers a great extent of ground, and is fairly entitled to be called a city of magnificent distances. The old city near the sea is rather



NATIVE HOUSE ON THE RIVER THAT FEEDS THE CANAL.

closely built, but it is not inhabited by Europeans to any extent. The Dutch, English, and other foreign merchants transact business there during the day ; but they live in the new part of Batavia, which spreads over the flat ground for several square miles. The houses are rarely of more than one story, as the country is subject to earthquakes, and nobody wants



to have a flight of stairs between him and the ground when these shakings begin. Nearly every house has a *campong*, or yard, around it, and this yard is filled with tropical trees in considerable variety. The great streets and roads are liberally provided with shade-trees, so that Batavia can hardly be seen, owing to the impossibility of peering through the dense foliage that is before you at every step.

"A canal with several branches runs through all this level area that they call Batavia, and for miles and miles it is built up with solid stone walls. It is fed by a small river coming down from the mountains, and serves a triple purpose: boats may navigate it; people may bathe there, or wash clothes in it; and the sewage of the city is said to be drained into it. Whether the water for household use is taken from it or not, I am unable to say; but we repeatedly saw Malay servants filling buckets with it, and then walking off in the direction of the houses. Circumstantial evidence was against them; but the clerk of the hotel says the water they were carrying was to be used for washing the floors of the houses and sprinkling the gravel-walks in the court-yards. Perhaps it is the suspicion that the water may be used for drinking purposes that leads so many of the inhabitants to shun it, and take seltzer, gin, claret, and other imported liquids to quench their thirst.

"They have a street railway here, but it is patronized only by the natives, the Chinese, and the low class of foreigners. The track is good enough, but the cars are the wildest contrivances you ever saw; they are common freight-cars fitted with rush seats, and their great weight makes them difficult to move along the way. Perhaps, if they had the proper kind of cars, the Europeans would ride in them, but they could hardly expect to patronize those now in use.

"It was a funny sight, when we were driving along the streets, to see the ladies out for their morning promenade, with their hair streaming down their shoulders, their bodies enclosed only in light wrappers, with loose sacks buttoned to the throat, and with slippers, but no stockings, on their feet. Most of them wore the sarong, or native petticoat, and they generally carried parasols to keep off the sun. This is the forenoon costume of the ladies before they go to breakfast, and it strikes a foreigner as very odd.

"Sometimes we saw a whole family sitting on the veranda of a house, in full view of everybody passing along the street, looking as if they had just got out of bed and were only half dressed. The men would be in dressing-gowns or pajamas, and the ladies with their hair down, as I have described, or twisted up into tight little lumps, so that the owners might

appear in the afternoon with a fine stock of curls. Occasionally we saw some fat, jolly old women with their hair cut close to the head, in order to keep off as much of the heat as possible.

"We visited the museum and the botanical garden, and found them quite interesting. The museum contains the products of Java, arranged so that you can readily see what the resources of the island are; and there are relics of ancient times that throw light upon the history of the country and its people. The botanical garden abounds in tropical plants, and reminded us of the garden at Singapore; but we had not time to make a list of its contents. We saw some fine specimens of a tree that had already attracted our attention at Singapore—the 'fan-palm,' or traveller's fountain, as it is called. It spreads out like a huge fan, with the lower part of the stalks quite bare, while the ends are formed exactly like feath-

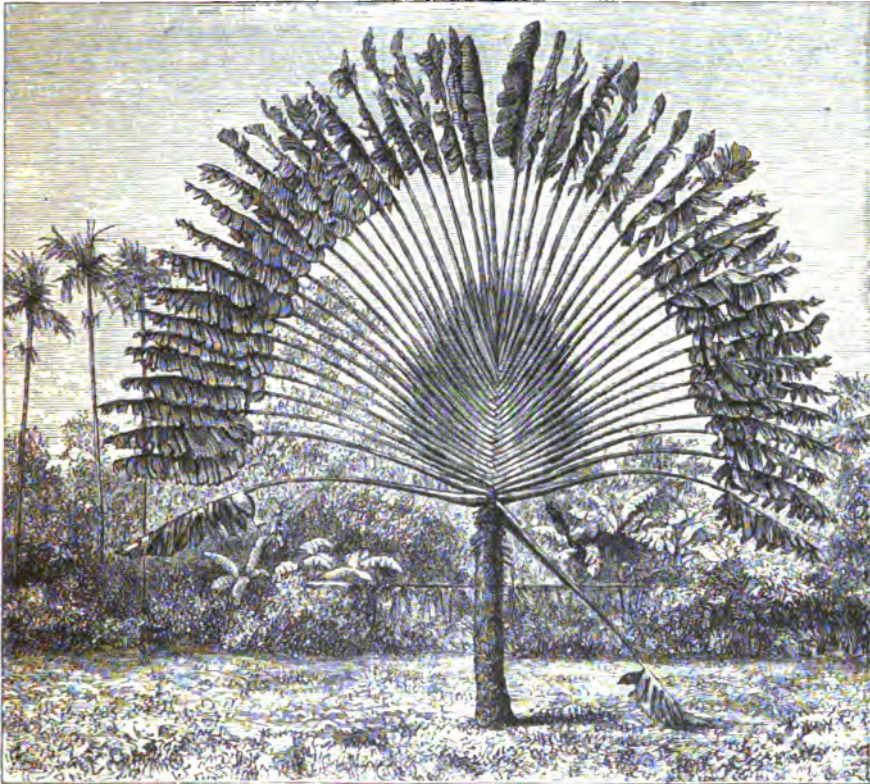


FAMILY PARTY IN BATAVIA.

ers. A small tree of this species would make a very good fan for a giant, such as we read of in Gulliver's travels.

"In the old part of Batavia we saw so many Chinese that it would not have required a great stretch of the imagination to believe that we

were once more in the Flowery Kingdom. In one of the narrowest streets we met a couple of Chinese porters carrying a burden suspended from a pole, the same as we had seen them in Canton and Shanghai, and if it had not been that our driver was very careful we might have run over them. The Chinese are very numerous in Batavia, and all through Java, and a great deal of the commercial business of the country is in their hands. They are engaged in all kinds of trade where money is to



FAN-PALM IN THE BOTANICAL GARDEN.

be made, and they have the same guilds and commercial associations that they have in Singapore, Hong-kong, and elsewhere. They have their temples and idols just as at home; and though many of them were born in Java, and will probably never see the soil of China, they are as thoroughly Chinese as though they were reared within the walls of Canton.

“One of the most common of the Chinese temples is that of the goddess ‘Ma-Chu,’ who is worshipped by sailors and those having business



CHINESE PORTERS.

on the water. She is represented with her two assistants; one of them is called 'Favorable-Wind-Ear,' and the other 'Thousand-Mile-Eye.' The first is supposed to have an ear that can catch the least indication of a wind to favor the sailor; and the latter possesses a clearness of vision that enables him to see a rock or other danger at the distance of a thousand miles. One listens, while the other looks; and between them they are believed able to insure a safe and speedy voyage to all their worshippers."

As our friends were somewhat wearied with their morning's work, they remained in-doors from the time of the "rys-taffel" till three o'clock. Then they followed the custom of the country by taking a bath, and dressing for dinner; and after dinner they continued to be in fashion by taking another drive. We will let Fred tell the story of what they saw in the afternoon and evening.

"The fashionable hour for a promenade is after dinner, and all the ladies and gentlemen consider it their duty to come out and be seen. There are plenty of carriages on the streets, and also a goodly number of gentlemen on horseback; and it is rather a pretty sight to see the gentlemen riding along by the carriages and chatting with the ladies inside. Then there are many pedestrians—the ladies being in light walking-dresses, and the gentlemen in full evening costume. The odd thing about the promenades is that both sexes are bareheaded. This is all well enough for the ladies; but it is rather strange to see a gentleman in full dress, and carrying a cane along the street, with his head as bare as though he was in a parlor. I am told that the ladies never wear hats or bon-

nets, and that the only thing of that sort ever seen in Batavia is when foreigners first arrive here from other parts of the world. A ladies' hat-store in Batavia would not be a paying speculation.

"On certain evenings there is music on the King's Square; and at such times everybody goes there to hear it. The crowd is large but very fashionable, as it is the proper thing to go there; and no one who can get out will venture to miss the performance. The band stops playing a little after dark, and then the drive may be said to be at its prettiest. The footman of each carriage carries a torch made of some resinous plant tied into a bundle, like a wisp of straw, and, as the carriages move around and pass and repass each other, the scene is a curious one. All the houses are a blaze of light, as the wide verandas are hung with lamps, and the whole family is gathered there when not out for the drive. The veranda is the general sitting-room, as everybody prefers it to the parlor on account of its being so much cooler.

"Perhaps you are wondering when the men find time for business. Well, they transact most of it in the forenoon, but their offices are open in the afternoon in charge of the clerks. For the clerks there is no such resting-time as I have described, or at best, only a short one, in the middle of the day. When a young man comes out here to seek his fortune, he must do pretty much as he would at home for the first year or two; when he is fairly established, he can have his time in the middle of the day, and live like other people."



GODDESS OF SAILORS AND HER ASSISTANTS.



## CHAPTER XXVI.

## BATAVIA TO BUITENZORG.—TROPICAL SCENES.—BIRDS OF PARADISE.

AS their time in Java was limited, our friends determined to cut short their stay in Batavia, and go at once to the interior. Accordingly, the morning following the day whose history was narrated in the last chapter saw them leaving the city by railway for Buitenzorg.

Buitenzorg is about forty miles from Batavia, and the summer residence of the Governor-general of Java; as it is summer all the year round in Java, he spends most of his time at this country-seat, and rarely visits Batavia except when business calls him there. The name is of Dutch origin, and signifies "without care," in imitation of the French *Sans Souci*. It is about one thousand feet above the level of the sea, and much cooler than Batavia; and the surrounding region is one of great natural beauty.

Doctor Bronson and his young companions were early at the railway-station, and purchased their tickets for the journey. They found three classes of carriages on the road; the first and second being patronized by foreigners, and the third class exclusively by natives and Chinese. For their first-class tickets they paid six florins and thirty cents—equal to two dollars and a half of our money. The second-class ticket costs half as much as the first, and the third half as much as the second, so that the natives are able to ride for about a cent and a half per mile. The third-class carriages were crowded to such an extent that Frank and Fred both remarked that the Javanese were as prompt as the Japanese to recognize the value of the railway. Men and women were closely packed on the rough seats of the carriages of the third class, while those in the first and second, especially the former, had plenty of room.

"I suppose this is so the world over," said Fred, as he contemplated the difference between the accommodations of the various classes on the train.

"Everywhere we have been, at any rate," responded Frank.

"Whatever accommodations you wish and can pay for," said the Doc-

tor, "you can have. If you want a special train at the price they demand, you can have it by paying in advance."

"It is the same in Java as in Europe, and, to a certain extent, we have similar arrangements in America.

We are more democratic in our ways than any other country of importance, and consequently have been slower to make the distinctions in railway travel that exist in other parts of the world. But we are steadily moving in that direction, and in time we will have all the distinctions of classes—special trains and all. In fact, we have them already."

"Aren't you mistaken, Doctor?" said Fred. "Surely we do not have three classes on our railways at home."

"Stop and think a moment," answered the Doctor, while there was a suggestion of a smile about his face. "We have the ordinary railway carriage and the Pullman car, have we not?"

"Certainly," was the reply; "and they are virtually two classes."

"Quite right. Then, on the principal lines of railway there are the emigrant trains, are there not?"

Fred acknowledged that the Doctor had the best of the argument, and the conversation came to an abrupt termination, as it was time for them to take their places in the carriage.

Away they started for their first ride on a railway-train south of the equator. The suburbs of the city were speedily passed, and then the train plunged into a tropical forest. The grade became steep as the hilly ground was reached, and two locomotives were necessary for a part of the way to pull the train up the heavy incline. Frank observed that the carriages were quite narrow, and he found by measuring, at the first station where they stopped, that the rails were only three and a half feet apart. The present terminus of the line is at Buitenzorg; but surveys have been made, and it is the intention to push the line forward and form a connection with the system of railway in the eastern part of the island.



SOME OF THE THIRD-CLASS PASSENGERS.

When this is done, a stranger will be able to travel the whole length of Java by rail, as he can now travel by wagon road.

Since the railway from Batavia to Buitenzorg was opened several villages have sprung into existence along the line, and some of them are quite pretty. They contain the residences of gentlemen whose business is at Batavia, and are generally arranged with excellent taste. The gardens are luxuriant, like nearly all gardens in the tropics; and some of the owners delight in adding wild animals to their collections of trees and plants.

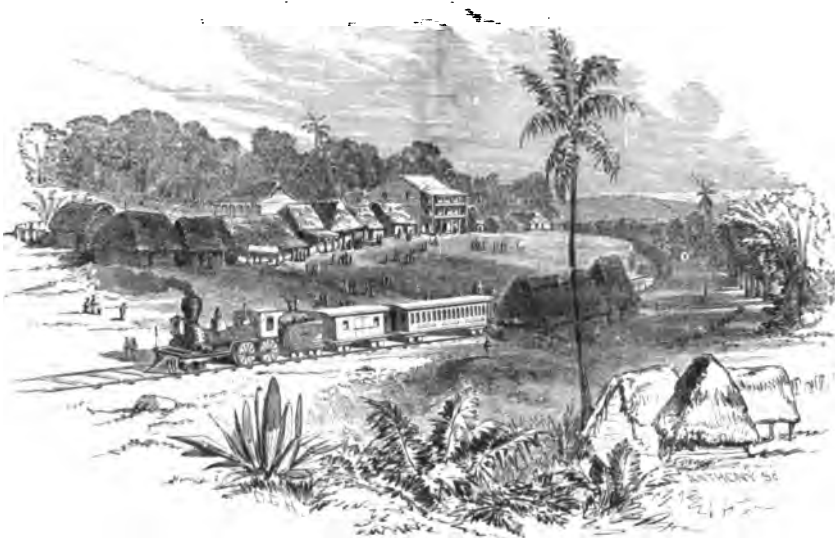
Then there are native villages in considerable number, some of them



VIEW IN A PRIVATE GARDEN.

concealed in the forest, and others standing in little clearings, where the trees form an agreeable background. The train stopped frequently, and

did not seem to be in a hurry, although it was called an express, and was the fastest on the line. Frank said that probably the heat of the tropics had the same influence on a locomotive as on a man, and prevented its



NATIVE VILLAGE NEAR THE RAILWAY.

going rapidly. Fred said that Frank's reasoning reminded him of the boy at school, who was asked to give an illustration of the expanding power of heat, and the contracting power of cold.

"What did he do?" Frank inquired.

"Why," responded Fred, "he thought for some minutes over the matter, and finally answered that the days in winter were not nearly as long as those in summer, and it must be the cold that contracted them."

The boys observed that the trees in some instances grew quite close to the track. Doctor Bronson explained to them that in the tropics it was no small matter to keep a railway-line clear of trees and vines, and sometimes the vines would grow over the track in a single night. It was necessary to keep men at work along the track, to cut away the vegetation where it threatened to interfere with the trains, and in the rainy season the force of men was sometimes doubled. "There is one good effect," said he, "of this luxuriant growth. The roots of the vines and trees become interlaced in the embankment on which the road is built, and prevent its being washed away by heavy rains. So you see there is, after all, a saving in keeping the railway in repair."





TROPICAL GROWTHS ALONG THE LINE.



Frank noticed that some of the telegraph-poles had little branches growing from them; and at one place he saw a man near the top of a pole engaged in cutting the limbs away. He called the attention of his companions to the novel sight.

"You will see more of those trees as you go into the interior," said the Doctor. "They grow with great rapidity; and unless the wood is thoroughly seasoned before the poles are set in the ground, they speedily take root and become trees again. They are more pertinacious than our American water-willows, as they will grow in any soil, wet or dry. Wherever a clearing is made in the forest these trees spring up as if by



"MANGOSTEENS!"

magic; and they run up so tall and straight as to be just what is wanted for telegraph uses."

At several of the stations the natives offered fruit of different kinds, and nearly all new to our young friends. They had been told that they would probably find the mangosteen for sale along the road; they had inquired for it in Singapore, but it was not in season there, and now their thoughts were bent upon discovering it between Batavia and Buitenzorg. Two or three times they were disappointed when they asked for it; but finally, at one of the stations, when Fred pronounced the word "mango-

steen," a native held up a bunch of fruit and nodded. The Doctor looked at the bunch, and nodded likewise, and Fred speedily paid for the prize.

Perhaps we had best let Fred tell the story of the mangosteen, which he did in his first letter from Buitenzorg:

"We have found the prince of fruits, and its name is mangosteen. It is about the size of a pippin apple, and of a purple color—a very dark purple, too. The husk, or rind, is about half an inch thick, and contains a bitter juice, which is used in the preparation of dye; it stains the fingers like aniline ink, and is not easy to wash off. Nature has wisely provided this protection for the fruit; if it had no more covering than the ordinary skin of an apple, the birds would eat it all up as soon as it was ripe. If I were a bird, and had a bill that would open the mangosteen, I would eat nothing else as long as I could get at it.

"You cut this husk with a sharp knife right across the centre, and then you open it in two parts. Out comes a lump of pulp as white as snow, and about the size of a small peach. It is divided into sections like the interior of an orange, and there is a sort of star on the outside that tells you, before you cut the husk, exactly how many of these sections there are. Having got at the pulp, you proceed to take the lump into your mouth and eat it; and you will be too busy for the next quarter of a minute to say anything.

"Hip! hip! hurrah! It melts away in your mouth like an over-ripe peach or strawberry; it has a taste that is slightly acid—very slightly, too—but you can no more describe all the flavor of it than you can describe how a canary sings, or a violet smells. There is no other fruit I ever tasted that begins to compare with it, though I hesitate to admit that there is anything to surpass our American strawberry in its perfection, or the American peach. If you could get all the flavors of our best fruits in one, and then give that one the 'meltingness' of the mangosteen, perhaps you might equal it; but till you can do so, there is no use denying that the tropics have the prince of fruits.

"Everybody tells us we can eat all the mangosteens we wish to, without the slightest fear of ill results. Perhaps one might get weary of them in time, but at present we are unable to find enough of them. If anything would reconcile me to a permanent residence in the tropics, it would be the hope of always having plenty of mangosteens at my command.

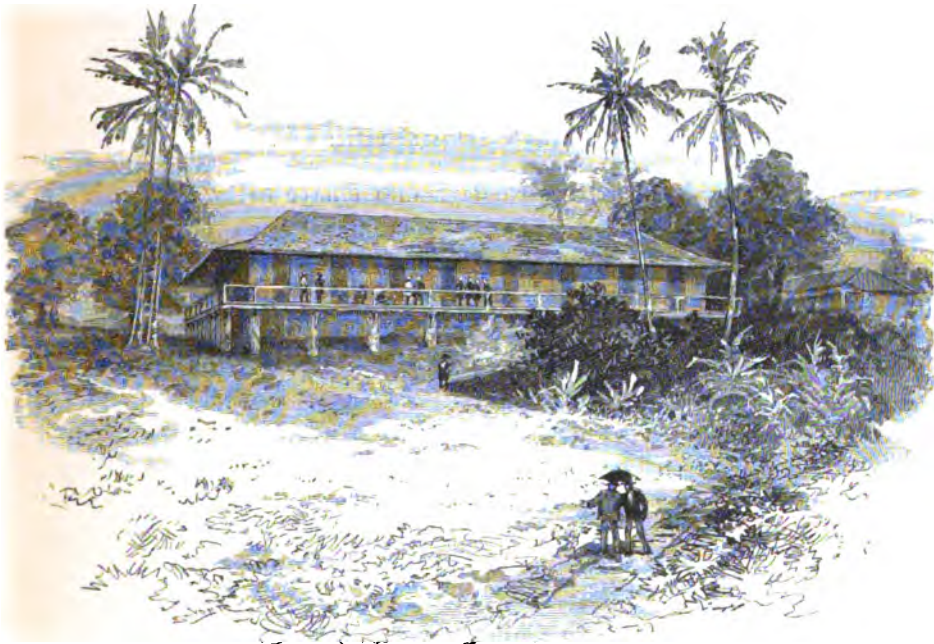
"You may think," Fred added, "that I have taken a good deal of space for describing this fruit, but I assure you I have not occupied half what it deserves. And if you were here you would agree with me, and be

willing to give it all the space at your command—in and beyond your mouth. But be careful and have it fully ripe; green mangosteens are apt to produce colic, as Frank can tell you of his own knowledge.”

The train reached Buitenzorg, and deposited our three travellers at the station. They had been recommended to the Hotel Bellevue, and were soon whirling along the road to that establishment. It proved a sort of pocket edition of the hotel at Batavia, as it was scattered over a considerable area; and they had to go out-of-doors to pass from their rooms to the dining-hall, but they found it had a delightful situation, as it was on the slope of a hill overlooking a thickly-wooded valley.

In describing the scene from the veranda in front of his rooms, Frank wrote as follows:

“Our vision sweeps an area of several miles, beginning with a valley,



VERANDA OF THE HOTEL BELLEVUE.

and ending with a high mountain that was once an active volcano. There are all the tropical trees imaginable in the valley before me. Without changing my position in my chair, I can see cocoa-palms with their clusters of fruit, betel-palms with tufts of green at the ends of tall trunks like flag-staffs, banana, bread-fruit, plantain, mangosteen, durian,



VIEW FROM THE VERANDA AT BUITENZORG.

and many other kinds of trees whose names I have not yet learned. It is the richest tropical scene that has yet come under my eyes.

“And, as if they were not rich enough in leafy decorations, the trees are adorned with numerous parasites, some in the form of creeping vines, and others in clusters and tufts springing from the crevices in the bark, where the winds and birds have deposited the seeds. Nourishment for these parasites come from the air, or from the trees to which they cling; sometimes the vines send down long threads which reach the ground, where they attach themselves and throw out roots. At a little distance they look like ropes, and you gaze at them in wonder. I have seen some of them more than fifty feet long, and about the size of my wrist; sometimes they are very thick and closely interlaced, so that it is no easy matter to ride or walk in a forest where they abound.

“As in Siam and Cochin China, the parasites frequently cause the death of the trees to which they cling; but the growth of trees is so rapid, and there is such an abundance of them, that nobody seems to have any sympathy for the victims in this matter of vegetable murder.

“Orchids are in great variety, and some of them are exceedingly beautiful. There is one known as the *Vanda Lowii*, which is described by Mr. Wallace in his account of the Malay Archipelago. It grows on the lower branches of trees, and its threads are often six or eight feet long, and

strung with flowers that vary in color from orange to red. These flowers are often three inches across, and their brilliancy is increased by the gloominess of the forests where they are found. Sometimes twenty or thirty flowers may be found on a single thread, and they form a regular spiral, as though strung there by hand.

"In other places you will see orchids like bright tufts of green clinging to the bark of the trees, and apparently forming a part of it. The botanists have found more than twenty varieties of this strange production of nature in Java alone, and probably a more careful examination will reveal many more.

"Some of the trees throw out shoots from their limbs, which ultimately take root and form separate trunks. The most notable example of this is the verengen: there is one of these trees in the governor's park, which has thrown out so many roots that it forms of itself quite a grove. It belongs, I presume, to the same family of tree as the famous banian of India, and to trees of other name but similar characteristics in other parts of the world.

"One of the most remarkable trees in the Malay Archipelago is said to begin its growth in mid-air. Can you guess how it does so?

"Originally the birds carry the seed of a certain parasite and drop it in the fork of a tall tree. The parasite throws out its branches into the air like other trees, and sends its roots downwards till they reach the ground. They spread as they descend, and form a sort of pyramid fifty or sixty feet high, and so shaped that you can often stand inside and have the body of the tree directly over your head. As the parasite grows it wraps itself around the parent tree, and ultimately kills it; and in this moist climate the dead trunk decays so rapidly that in a few years there is hardly a trace of it left. The branches of the new tree throw out roots of their own that go down to the ground and fasten themselves, and every year sees several new ones. We have no tree like this in the



A BAD ROAD.





THE VANDA LOWII.

United States, at least none that I know of.

"There is a small river flowing through the valley in front of where I am writing; it comes from the mountains several miles away, and we can trace its course by the little openings it makes in the forest. For a few hundred yards we have it in full view, and then it makes a bend right at the foot of the hill where the hotel stands, and disappears among the tropical trees. Where it first comes into our range of vision there is a bridge thrown across it, and every little while we can see the natives passing and repassing to and from a village that is concealed under the trees. Very often we see them bathing in the stream, or washing clothes there; when the bathers are a group of boys there is a great deal of fun and laughter, and the scene is quite as jolly when there is a lot of girls in the water. They can swim like ducks, and are constantly playing harmless little tricks on each other, and sometimes in the afternoon their laughter is steadily ringing in our ears. The Javanese Malays are a happy people, if I may judge by the inhabitants of

this little village, and they are as fond of the water as so many beavers.

"Before we left Batavia we were told that we should have rain here every afternoon at three o'clock. Fred and I laughed at the suggestion, but the Doctor did not; and we found, on arriving, that we had laughed too soon. Really it rains every afternoon, and it does not vary twenty minutes either way from three o'clock. The clouds form over the mountain in the distance, and then they come sweeping on and on till they reach this spot. The rain comes down first in a sprinkle, then in a shower, and then in a pour, as though some great flood-gates in the sky had been opened as wide as possible, to give the water a chance. The rain

lasts from one to three hours, and then the clouds go away and the sky is clear. Sometimes there is a chance for a promenade just about sunset, and sometimes not; in any event, the grass is so wet that we can only follow the roads if we would avoid coming home with our feet soaked.

"We have arranged our plans in such a way as to do our sight-seeing in the forenoon, and devote the afternoon to writing and sleeping.

"We have visited the remarkable garden attached to the governor's



A TREE GROWING IN MID-AIR.

residence, and seen the rare collection of specimens of the animal and vegetable life of the Malay Archipelago; and the more we see of it, the more do we wish to see. There are tigers and other animals, that it is

better to see in cages than to meet at home in the forest ; there are snakes in good variety ; there are tanks containing a great number of fresh-water fishes ; and last, but not least, there is a splendid collection of birds. I never knew what a variety of birds and what curious ones there are in the islands of the Java Sea, till I saw this collection here.

"You have heard of the birds of paradise, haven't you ? They have some of them here, but not all the different kinds, as they are difficult to capture, and very difficult to keep alive after they have been taken.

"These birds are not natives of Java, but come from the Moluccas and other islands farther to the east. They were first called paradise birds by the writers of three hundred years ago, and some of the Portuguese and Dutch travellers told a good many fables about them. John Van Linschoten, who wrote in 1598, says that 'no one has seen these birds alive, for they live in the air, always turning towards the sun, and never lighting on the earth till they die ; for they have neither feet nor wings, as may be seen by the birds carried to India, and sometimes to Holland.' More than a hundred years later, an English writer, who saw some specimens at Amboyna, was told that they came to Banda to eat nutmegs, by which they became intoxicated and fell down senseless.

"We were disappointed in the size of the birds in the governor's garden, as we had supposed that the bird of paradise was very large. But we found they were only moderate-sized, and resembled crows and ravens in their general appearance and habits, but not at all in their plumage. Instead of being of a solemn black, like their consins I have mentioned, they have the most extraordinary arrangement of feathers that any bird can boast. Mr. Wallace says that several species have large tufts of delicate, bright-colored feathers springing from each side of the body beneath the wings, forming trains, or fans, or shields ; and the middle feathers of the tail are often elongated into wires, twisted into fantastic shapes, or adorned with the most brilliant metallic tints. In another set of species these plumes spring from the head, the back, or the shoulders ; while the intensity of color and of metallic lustre displayed by their plumage is not to be equalled by any other birds except, perhaps, the humming-birds, and is not surpassed by these.

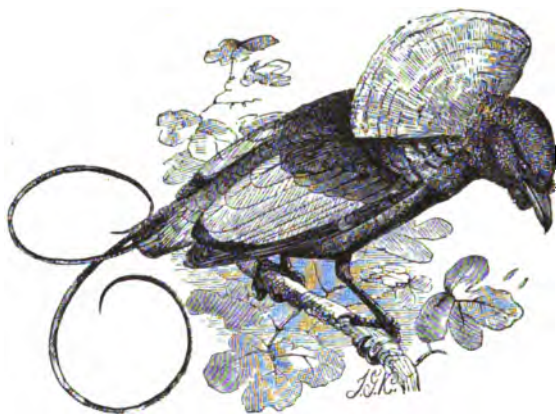
"The largest of these birds is known as the Great Bird of Paradise, and is seventeen or eighteen inches from the point of the beak to the end of his tail. There is nothing remarkable about his body, wings, and tail, which are of a deep brown color, varying somewhat in shade, while the head and neck are of a pale yellow. The wonderful things are the plumes that spring from each side beneath the wings ; they are some-



GROUP OF BIRDS IN THE MALAY ARCHIPELAGO.



times two feet long, and of a bright orange-color tinged with gold; and they can be raised and spread out at the pleasure of the owner like the



MAGNIFICENT BIRD OF PARADISE.

tail of a peacock. When they are thus extended you can hardly see the body of the bird, as they seem to envelop it completely; and if you are hunting him, and ready for a shot, you must guess how much of what you see is bird and how much feathers. It is only the male bird that gets himself up so gorgeously; the female is a plain-looking creature, of a uniform

brown color, without a bit of ornament anywhere. She might be mistaken for a crow that had been left overnight in a coffee-pot.

“Then there is the Red Bird of Paradise, which is somewhat smaller than the one I have just described, and comes from a small island off the coast of New Guinea. There is the Magnificent Bird of Paradise, from the main-land of New Guinea, which has a tuft or fan of yellow feathers springing from the back of his neck, and shading his shoulders; and his tail contains two long feathers, each curving outwards, so that it forms a circle. Fred said that these tail-feathers looked like the handles of a pair of scissors, and he wondered if the bird could be taken up by them. The Superb



SUPERB BIRD OF PARADISE.

Bird of Paradise has a plumage of glossy black, and is not unlike a crow, so far as his body is concerned; but he has a remarkable shield on his breast of stiff, narrow feathers, very glossy, and of a bright tinge



of bluish green. On his head he has another and larger shield, of a velvety black color, and tinged with purple and bronze. This shield is longer than the wings, and gives the bird a most extraordinary appearance.

“Mr. Wallace mentions no less than eighteen varieties of the birds of paradise. I have not time to describe all of them, and believe I have told you of those that are the most remarkable. All of them are very pretty, and would be a fine addition to a public or private museum. There is one known as the Six-shafted Bird of Paradise that has six little wires springing from the forehead, and extending over the body to the tip of the tail.

These wires have little tufts at the ends, but for the rest of the way they are as bare as knitting-needles. There is another, called the Long-tailed Bird of Paradise, and it is partially described by its name,

as its tail is very long, and of the most brilliant colors. Then it has a tuft of blue and green plumes springing from each side of the breast in such a way that when the bird is standing on a tree the position of the wings is entirely concealed.

“Perhaps you have heard enough about the birds of the Malay Archipelago for the present. The rain promises to be over in a little while, and we may be able to take a sunset walk. Of one thing we are certain: there will be no dust on the road, and the grass will be beautifully green.”



SIX-SHAFTED BIRD OF PARADISE.



LONG-TAILED BIRD OF PARADISE.

## CHAPTER XXVII.

A CHAPTER ON POLITICAL ECONOMY.—THE DUTCH CULTURE SYSTEM  
IN JAVA.

FOR several days Frank and Fred, accompanied by the genial Doctor, made excursions in the neighborhood of Buitenzorg in the forenoon, and remained in-doors, during the rainy period, in the afternoon. A good many things came under their observation; they studied the agriculture in the region around the summer capital, and learned all they could about the manners and customs of the people. They investigated the peculiarities of the Dutch dominion over Java, and were much interested in the problem of governing seventeen millions of Asiatics with thirty thousand Europeans in such a way as to keep the millions perfectly content with the new rule, and enable a handsome amount of money to go every year from Java to the treasury of Holland.

The rainy afternoons were spent in reading, drawing, writing, and conversation; and the boys soon learned that the time in-doors was by no means without value. They formed an acquaintance with several gentlemen who were stopping at the hotel for the sake of the breezes, that were cooler than those of the sea-coast. Many of the foreign residents of Batavia are in the habit of going frequently to Buitenzorg, as a New Yorker goes to Saratoga; and this recreation is so much the fashion that several hotels do a very good business in providing for their wants. The Bellevue was one of the popular resorts, and it happened that there was quite a party of Batavians there at the same time as our friends.

While making notes of their visit to the governor's garden, the boys began drawing pictures of the elephant as he would appear when developed according to the theories of Doctor Darwin. Frank made the Yankee elephant with the traditional garments and jack-knife, and Fred followed it with a Chinese elephant peddling cigars from a small box. Frank designed the operatic elephant entertaining an audience with a song, and was immediately followed by Fred with the elephant in love,

engaged in a serenade. Of course there was no allusion to Frank's frequent thoughts of somebody at home, and if any one entertained the idea he kept it to himself. The series was brought to a close by a delineation of the original elephant in two acts; but the designers neglected to state where this particular performance of the animal could be witnessed.

One of the first practical results of their afternoon work was the preparation of a brief description of Java, which was duly forwarded by mail to their friends. Both the boys contributed to its preparation, and each made a copy for his own use. Here is the story:



THE CHINESE ELEPHANT.

"Java is not of great extent. It is only six hundred miles long, and varies from sixty to one hundred and twenty in width: its area added to that of the island of Madura, which lies near it, is estimated at thirty-eight thousand geographical square miles. Its population is not far from seventeen millions; and when this is considered with relation to its extent, it will be seen that Java is one of the most densely-peopled countries in the world. That the country has prospered under the rule of the Dutch, is evident from the growth of the population, which was little more than five millions in 1826, nine millions in 1850, and is now at the figure just mentioned. If it goes on at this rate, doubling about every twenty-six years, there will come a time when it will be obliged to put out a placard announcing 'standing room only!'"

"It is said that formerly the religion of the people of Java was Brahminical, and when Buddhism be-



THE YANKEE ELEPHANT.

"Java is not of great extent. It is only six hundred miles long, and varies from sixty to one hundred and twenty in width: its area added to that of the island of Madura, which lies near it, is estimated at thirty-eight thousand geographical square miles. Its population is not far from seventeen millions; and when this is con-



THE OPERATIC ELEPHANT.



THE ELEPHANT IN LOVE.

abundant, and show that the ancient Javanese had great artistic skill.

"Few persons have any idea of the extent of these ruins, and their corresponding splendor. They are far more extensive than those of Central America, and some travellers think they surpass the temple ruins of India. In the centre of Java there is a mass of ruins where there were formerly twenty separate temples, and the largest of them is thought to have been ninety feet high. In another place there is a collection of no less than two hundred and ninety-six temples, all greatly ruined, but bearing evidence of a high class of art in their construction. Sculptured figures are abundant, and the walls of forts, temples, houses, baths, and aqueducts can be distinctly traced. It is a pity that the government does not pay some attention to these ruins, and save them from decay. At present they are left to the action of the elements, which is very rapid in this tropical land.

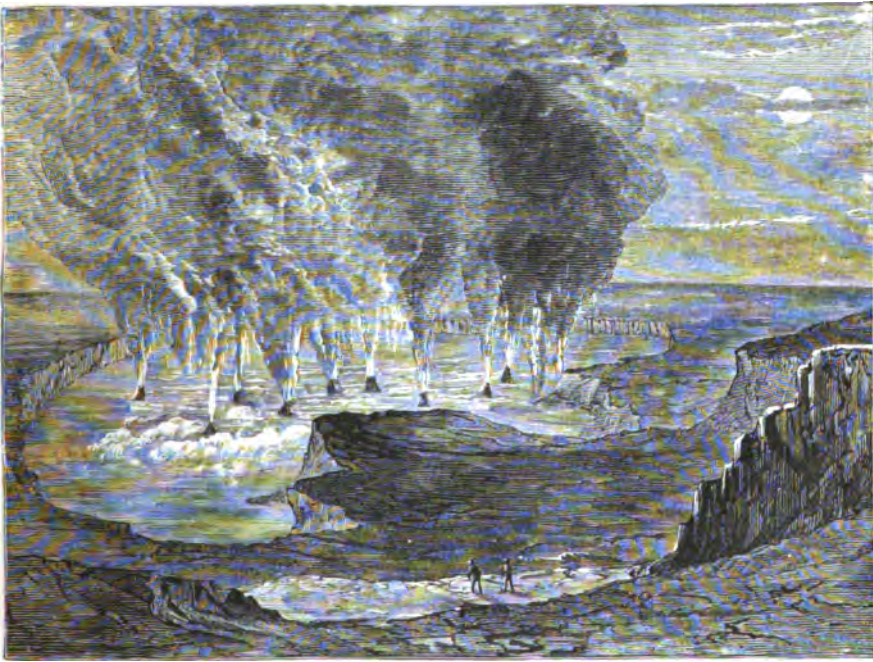
"Java is by no means a level island. There is a good deal of country sufficiently level for agricultural purposes, but the island has its full share of mountains,

came the fashion of the East the new form was adopted. This continued till about four hundred years ago, when Mohammedanism was introduced, and it has remained to this day; so that the greater part of the population at present are Moslems. There are many traces of the former character of the people in the shape of monuments and ruins, some of them of great extent. In the eastern part of the island these remains are very



ANCIENT BAS-RELIEF—JAVA.

and no less than forty-six of them are volcanic. Twenty of the volcanoes are active, and one of them is the second largest in the world—that of Kilauea, in the Sandwich Islands, being the chief. It is known as the Tenger Mountain, and its crater is three miles in diameter, with a level bottom of sand, containing a dozen or more cones that are constantly smoking. The whole island is supposed to be of volcanic origin, and is subject to frequent earthquakes; so that the practice of building houses only one story high is a very sensible precaution. The island has a backbone of mountains, as the principal chain extends from one end



A MONSTER VOLCANO.

of Java to the other. There is another small chain near the south coast; and all over the island there are hot springs maintained by the fires far down in the ground.

“We have already told of the trees and animals of Java, as well as some other things. We will come as soon as we can to the topic that interests us more than any other—the relations between the natives and the Dutch rulers. To do this intelligently, we must go back and see what the history of the island has been.

“Early in the seventeenth century the Dutch began to trade with the



native chiefs and people of Java, and obtained permission to build a fort and trading post near the present site of Batavia. In a little while they went to war with the natives; and by the end of the century had obtained considerable territory. From that time on they have had occasional difficulties, and each time when the war was ended the result has been that the position of the Dutch was strengthened.

"They had possession of the island till 1811, when England took it from them, and held it four years. Then it was given back to Holland by treaty, and has remained her peaceful possession ever since.

"The principal exports are coffee, sugar, rice, indigo, spices, tin, pepper, India-rubber, cinnamon, tea, camphor, rattans, and various other things; and the aggregate amount of the trade is very great. Down to the time of the restoration by the English, the expense of maintaining Java had been quite as great as the revenue from it; and it was this fact that made the English willing to give it up. If they had known that it would be made to yield a net revenue of five million dollars a year, over and above the expense of maintaining the local government, they would have thought twice before surrendering it.

"The genius of one man—General Johannes Van den Bosch, Governor-general and Commissary-general of the Dutch East Indies, from 1830 to 1834—brought about this result, and made Java the most profitable colony that any country has ever known.

"And he not only made it profitable to Holland, but prosperous for its inhabitants; while they enriched the rulers, they were themselves enriched. Anybody who has money may benefit the poor at his own expense, but it takes a man of genius to confer an equal benefit on the poor, and make something for himself or his employers out of the transaction. Such a man was General Van den Bosch.

"Down to 1830, the expenditure to maintain the Dutch government in Java was a steady burden on the treasury of Holland, as it was greater than the revenue from the island. General Van den Bosch was sent out in that year with plans of his own for making Java profitable; but there were many who considered him a visionary schemer, whose experiments were sure to result in disastrous failure. He proposed to offer liberal terms to the respectable Europeans in Java for cultivating the soil, and producing such things as were needed in Europe. He further proposed to make the peasants who lived on the government lands plant a certain portion of those lands with crops needed in Europe, and which the government would buy of them at a certain fixed rate. His scheme was shaped to cover the following principles:

- "1. Profit to the peasant, to make the new system acceptable.
- "2. Profit to the contractor, to induce its extension by private enterprise.
- "3. A percentage to the officials, to secure their active support.



PEASANT FARM-HOUSES.

"4. Personal interest of the village community in its success, so as to secure careful cultivation.

"5. Improvement in the tax-payer's means, in order to increase the revenue and facilitate its payment.\*

"The plan for making advances to the contractors was carried out by crediting each one with the money estimated necessary to start his manufactory; and he was expected to apply it under government supervision to the construction of his mill, and placing it in working order. It was loaned to him for twelve years, without interest; but he was expected to repay a tenth of it the third year, and a similar amount in each succeeding year till the whole amount was repaid. Many persons refused the proposal, but there were others who gladly accepted it, and went to work at once.

"It was further provided that the government would advance to the

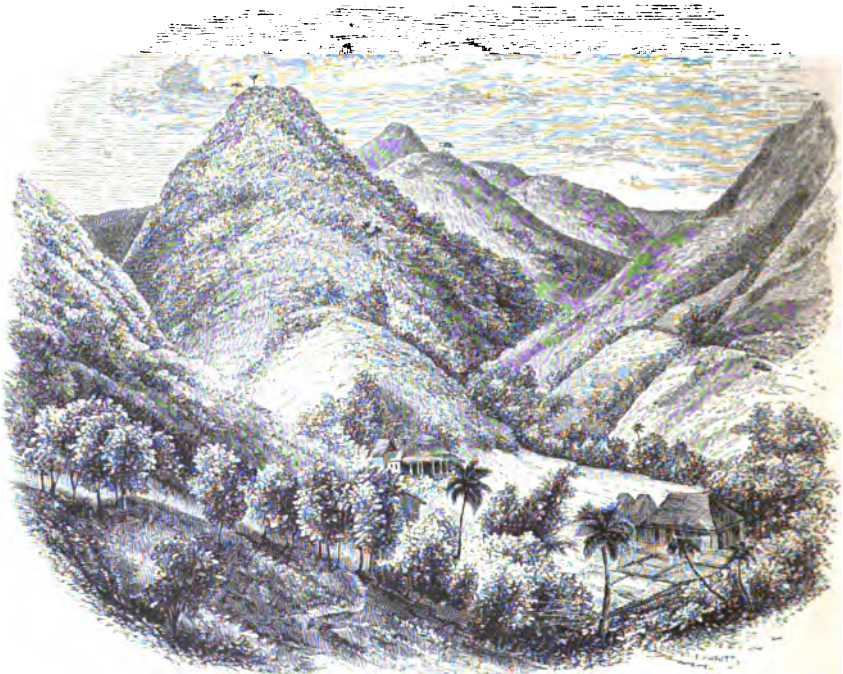
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\* For much of the information concerning the culture-system of General Van den Bosch and its results, the author is indebted to the excellent and exhaustive work of Mr. J. W. B. Money, entitled "Java; or, How to Manage a Colony."

contractor, at the beginning of every season, the money necessary to produce his crop ; and this advance was to be repaid out of the crop when it was gathered. There were many details of the plan which would require too much space to describe, and they were varied from time to time in order to make them as practicable as possible. Besides—”

“Stop a moment,” said Frank, when they had reached this point. “Don’t you think we are making this part of our story a little too heavy? I am afraid Mary and Miss Effie, and the rest of the young folks in our families, may not enjoy it.”

“Perhaps not,” replied Fred ; “but then, you know, the whole family is to read our letters, and I am sure the subject will be very interesting to my father, and to yours too. And I think you will find the younger folks will like it, because it will teach them something of what is called political economy. Every intelligent boy and girl in America wants to



HOME OF A PROSPEROUS CONTRACTOR.

know about the science of government ; the history of the colonial government of Java is very interesting to both of us, and I believe we had better assume that it will be equally so to persons of our age at home.

So go ahead, if you please, and if anybody doesn't want to read what we have written, he may skip it."

Work was resumed without further discussion.

"Down to the time we are considering the chief product of the soil



COFFEE-PLANTATION IN THE MOUNTAINS.

tilled by the Javanese peasants was rice. General Van den Bosch proposed to have them cultivate coffee, sugar, and other articles that commanded a ready sale in Europe; and, as the government would buy the crop at a certain fixed price on the spot, the peasant would have a market at his door, and feel certain that he would not be robbed by middlemen and commission merchants, as is too often the case in other countries besides Java. The price paid by government was sufficient to make a fair return for the labor employed in making the crop, and at the same time low enough to allow a handsome profit when it was sold in Holland."

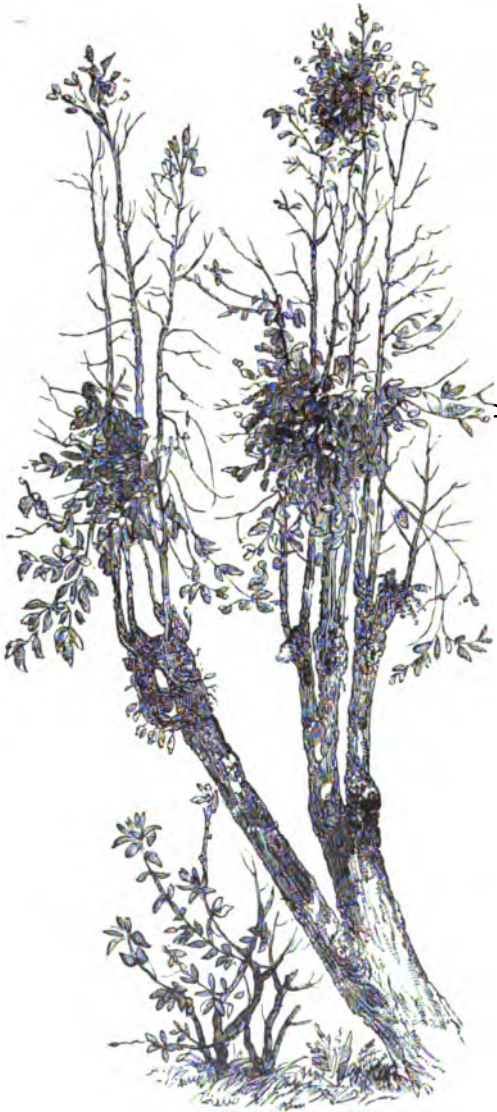
"That explains something I have never before understood," said Fred, as he laid aside his pen for a moment.

"What is that?" Frank inquired.

"Why, we often read in the papers at home about the price of 'Old



Government Java Coffee.' It is the coffee the government buys of the producer, and then sells in the market."



"OLD GOVERNMENT JAVA."

"Exactly so," Frank responded. "That bit of information will interest a good many boys in America."

"And men too," chimed in the Doctor, who was sitting in an arm-chair close at hand, and watching the clouds as they rolled over the mountain in the background of the view from the veranda.

"I want to know," said Frank, "how the enterprising general proposed to compel the people to work in the fields and cultivate the crops, when they might spend their time under the trees, and pluck the fruit when they needed it to supply their wants."

"Mr. Money says," answered Fred, "that the general made a careful study of the relations between the people and their native rulers. He found a patriarchal form of government, the villages being ruled by their chosen chiefs; several villages forming a sort of district, and several districts united into a province or principality. It

was the policy of General Van den Bosch to take this organization as he found it; and, instead of overthrowing the native rulers, he would strengthen them, and make it for their interest, and that of their subjects, to be on friendly terms with the Dutch. This policy was adopted, and it is carried out to this day.



“Now, under the old system of government, before the Dutch came to Java, the peasant was required to give one-fifth of his labor gratuitously in return for the rent of the land, which was considered to be the property of the prince. When the Dutch captured a region, they claimed that they had captured the prince, and not the people, and that the revenues belonged to them as the conquerors. In some of the provinces the Dutch hold possession by treaty, and not by conquest; and the revenues continue to go to the prince as before. To develop the producing capacities of the country, they made an estimate of the quantity of any given article that each district ought to raise under proper management, and then they required the native ruler of the district to see that there was the proper production. Allowance was made for bad seasons, or other calamities; and if the production fell short, without any assignable cause, the ruler found his revenues cut off. The government bought the product, as we have already seen, and made its profit. The prince had his revenue and was happy, and the same was the case with the subordinate chiefs. The peasant was rewarded for his labor; and, as he had no more tax to pay than under the old system, he had nothing to complain of.

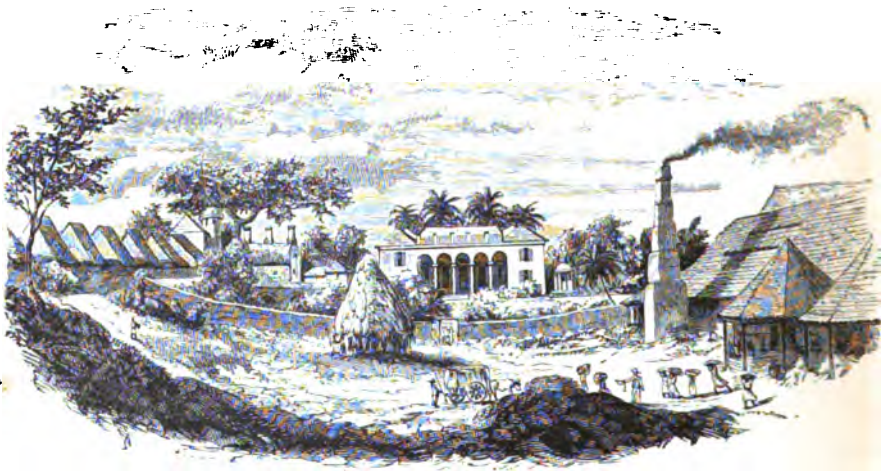
“The crown-lands, or those obtained by conquest, were the ones let out to contractors. They were generally on long leases, so that the contractor was encouraged to make improvements; and the result is that cultivation by private management has been greatly increased, and large fortunes have been made in many instances. The government takes its rental by receiving a share of the crops; and it watches over the relations between the lessee and his laborers, to see that neither practices any imposition on the other. Each must keep his agreement, under severe penalties, and the whole system is said to work very smoothly.

“The Dutch officials all over the island have no dealings with the



A JAVANESE CHIEF.

natives except through their own rulers. The native princes have the title of regents, and the authority of each is supreme in his district as long as he carries out the policy of the government. A Dutch resident or assistant-resident lives near each regent, and is considered to be his 'elder brother,' who advises the younger what to do. He frequently makes recommendations to the regent, though he never gives orders; but it is pretty clearly understood that he expects the recommendation to be adopted. The resident has a few subordinate Europeans, who go through the district at regular intervals, and visit every village it contains. They talk with the lower native rulers, examine the proceedings of the native courts, investigate the condition of the government plantations, hear the



AN IMPROVED SUGAR ESTATE.

complaints of the people against their head men, or petty chiefs, and listen to any suggestions that are offered. Disputes are settled in the local courts without the intervention of a Dutch official; but in case of dissatisfaction they may be appealed to the district court, and, if not settled there, they may be carried to the highest courts of the island.

"There is a very efficient police system all through Java, and by means of it, added to the employment of the people in honest industry, the amount of crime has been enormously reduced in the past fifty years. Every man, woman, and child in Java is registered, and each village chief is made responsible to a certain extent for the conduct of his subjects. An offence against the law can be readily traced, and if the village or its chief are at fault, a fine is assessed upon them. Consequently everybody

in a village is directly interested in seeing that everybody else behaves properly.

“Well, to sum up the results of the Dutch system of culture in Java, we can say as follows:

“From being an expense to Holland, the island now yields an annual revenue of more than five millions of dollars to the royal treasury, after paying all the costs of the colonial rule. The expenses of the latter are by no means small, as the salaries of the officials are on a liberal scale. The Governor-general receives \$100,000 a year, besides \$60,000 additional for entertainments. It is said that the latter figure pays nearly all his expenses, so that he can, if he chooses, lay aside \$100,000 a year for a rainy day. A Resident in a province receives \$10,000, in addition to free rent of house and all surrounding buildings, and an allowance for extras. The subordinate officials are paid in proportion; so that nobody is obliged to rob the government or the people in order to make an honest living.



RETAINERS OF A JAVANESE REGENT.

“Crime and litigation have been so reduced that the sittings of the local courts do not average thirty days a year.

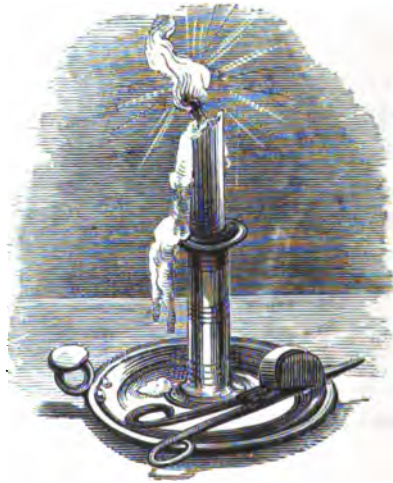
“Formerly there was much poverty and suffering in Java; now nearly every man, woman, and child appears to be well fed and clothed, and a beggar is a very rare sight.

“The import and export trade have been increased fourfold, in spite of the protective policy, which is the necessary attendant of the Java culture system.

“The population has more than trebled in sixty years, and promises to increase in the same ratio, unless interrupted by some great calamity.

"Those who have travelled in both Java and India say that the contrast in the conditions of the two countries is something enormous. In Java there is hardly any indication of poverty, and the public works are all in excellent shape; while in India the reverse is the case. Want and degradation are visible everywhere, and the traveller has daily and hourly appeals for charity. Famines are frequent in India, and in the year 1877 more than a million people died of starvation in Bengal and Madras. Famines are virtually unknown in Java, and in case of a general drought to cut off the crops, relief could be carried promptly to all parts of the island by means of the excellent roads that the Dutch have constructed.

"There is a great deal more that we might say, but it is getting near bed-time, and we will stop for the present. The wind sets our candle in a flicker; and it is 'guttering' in a way that threatens to extinguish it altogether. Good-night!"



"GOOD-NIGHT."

## CHAPTER XXVIII.

## RICE CULTURE IN JAVA.—MILITARY AND SOCIAL MATTERS.

**B**RIGHT and early the next morning the boys were out for a visit to a place where there was a spring of remarkably cold water. It was about two miles from Buitenzorg, and the road leading to it ran through a palm forest and among rice-fields. They had an opportunity to see the care with which the Javanese till their land. The hilly ground is laid out in terraces, one above another, and when the water has performed its work in one place, it goes to the terrace next below; thus it is made to do duty over and over again. There are large reservoirs where water can be stored in the wet season, and kept for the period when the rain-fall ceases. By close attention to the needs of the soil and the peculiarities of the climate, the Javanese are able to make their land extremely productive, and a failure of crops is a very rare occurrence. On much of the rice-land they grow two crops a year.

The spring was of goodly size, and flowed into a pool fifty or sixty feet across. A house had been erected at one side of this pool, and was overshadowed by banana and cocoa trees; it had a lot of dressing-rooms, where the boys were not long in donning the proper costume for a bath. They shivered somewhat when they first entered the water; but the shock did not last long, and then they found the sensation was most delicious. The place was in charge of a Chinese, who demanded a most exorbitant price for the use of the bath and a few bananas and mangosteens that were ordered. When they offered a low sum, he bowed, and seemed to say that, if he could not have what he wanted, he would take what they offered, which was a good deal more than he deserved.

On their return they had a different view of the rice-fields, and Fred made note of the fact that when you look upwards on a lot of rice-fields you see nothing but a series of terraces, while, looking downwards, you seem to be gazing on a lake. While the water is on the flats, the ground is stirred with a harrow drawn by a pair of buffaloes; the rice is sown, and as soon as the plants are of the requisite height the surplus ones are





THE HOUSE AT THE SPRING.

taken out and transplanted. The crop is then started, and the farmer has little to do till the time of harvest, beyond taking care that his fields have plenty of water. When the harvest is made, the paddy—as the uncleaned rice is called—is cut and taken to the mill.

Rice-mills are abundant in Java; some are run by steam, many by water, and many small ones by horses and buffaloes. The rice-mill is quite simple, and consists of a shaft like a ship's capstan and four projecting arms. Each arm has a wheel at the end, and as the shaft goes round the wheels revolve in a circular groove containing the rice to be cleaned. The wheel removes the husk, and when this is done a winnowing-mill separates the rice from the chaff or trash. This is the whole operation. The rice-mill of to-day is practically what it was a hundred years ago.

The Dutch have introduced farming implements of the European pattern on some of the estates, but the natives do not generally take kindly to the innovation. They prefer the old form of ploughs which have been in use from ancient days, and think that what was good for their fathers is good for them. Frank made a sketch of a primitive plough; it had a single handle, and its point could only scratch a furrow in the soil without turning it over.

At one place they saw a native engaged in pounding coffee in a large mortar, to separate the berry from the hull. He had a heavy pestle which he held in both hands, and the perspiration standing on his face showed that the labor was not one of pure pleasure.

On all the large coffee estates improved machinery is in use for the preparation of the product. The berry as it comes from the tree is about



POUNDING COFFEE.

the size of an English walnut; the bean is enclosed in a thick husk, and the great point in the preparation is to remove the husk without injuring the bean. Pounding by hand is likely to damage the bean by breaking it, and when this is done the market value of the coffee is considerably reduced. Inventors have studied the problem, and a good many machines have been devised to accomplish the desired separation. The most successful one thus far is the invention of an Englishman in Ceylon, and his machines are in use all over the coffee-producing world.

He has called the principle of specific gravity to his aid, and made it



DUTCH OVERSEERS.

very useful. The coffee-berry floats on water, as the husk is very light, but the bean by itself sinks to the bottom. A stream of water floats the berries along a narrow channel, and feeds them automatically into a groove where two plates of copper revolve in opposite directions about half an inch apart. These plates crush the berry, but do not injure the bean; the husk and bean together are carried to a trough, where the bean sinks and is caught in a tub, while the useless husk floats away to whatever distance the water is made to carry it. The coffee is then spread out on a platform and dried in the sun, and it is afterwards sorted, winnowed,

and made ready for market. The work is supervised by Dutch overseers, but all the manual labor is performed by natives.

On returning from their ride, and while at breakfast, the boys had a conversation with one of the gentlemen whose acquaintance they had made during the rainy afternoons on the veranda. Fred was curious to know why he did not hear a single native speaking Dutch or English, but confining himself strictly to Malay.

"That is easily explained," said the gentleman. "It is the policy of the Dutch not to teach their language to the natives, but they require all their own officials to learn Malay. They have a school or college in Holland, at the old town of Delft, which was established in 1842, for the express purpose of fitting young men for the East Indian service. Before they can graduate, the students must pass an examination in the usual college studies, and also in the Malay language, Mohammedan justice and laws, and in a knowledge of the country and nations of Netherlands India. Of course they are not expected to speak the Malay language fluently on leaving college, but they know a good deal of it when they land here, and are expected to know more before they have been long in Java. If they are not able to converse easily in Malay by the end of a couple of years, they are liable to be sent home. This makes them study hard, and renders them far more useful than if they could talk only in Dutch.

"You see how it works," he continued. "The Dutch officials can talk and write in their own language with very little fear that the natives can understand a word; but no native can write or say anything that every Dutch official cannot comprehend at once. On several occasions they have been able to nip conspiracies in the bud by this advantage, particularly at the time of the great mutiny in India. Then they do not encourage missionaries to labor among the natives; they argue that the natives are quite content with the religion they have, and it would interfere with their labor in the field to become interested in Christianity. And if a missionary should open a school to teach any other language than Malay, and endeavored to tell the principles of any European or American religion to the natives, he would be very liable to receive a notice to leave the island at an early date."

A company of soldiers marched past the hotel while the party was at breakfast. After looking at them, Fred inquired, "How large an army do they keep here, and how is it composed?"

"The number of troops in the field, or on duty in garrisons, varies from time to time," was the reply, "and therefore an account of the army at one date is not altogether good for another. The army is composed,



like that of India, partly of native and partly of European soldiers. The native force is exclusively Mohammedan, and is filled up by voluntary enlistments, never by conscriptions. The European portion is also voluntary, and the conscript troops in the army in Holland are never sent to Java. The infantry is divided into field battalions and garrison battalions, and the soldiers in each battalion are one-third European and two-thirds native. Each battalion contains six companies, the two flank companies consisting of European soldiers, and the four centre companies of natives. The native companies are composed of the different Mohammedan tribes and sects from all parts of Netherlands India, all mixed together, so that there shall never be a large majority of one kind of people in the same battalion."

"That is a very shrewd arrangement," said Frank, "as it prevents a mutiny by making it impossible for a whole battalion to have a common grievance."

"Not only that," the gentleman replied, "but it facilitates the movement of the troops; and the Dutch say that their principal object in making the battalions in this way was in consequence of the character of the service. The Dutch East Indies are of great extent, and it is often necessary to make marches where there are no roads, and the few bridges that exist are only intended for persons on foot. Consequently, they can never



FOOT-BRIDGE OVER A MOUNTAIN STREAM.



move their troops in large bodies, owing to the difficulty of carrying provisions. Each battalion under the present system has the means of transporting its own provisions, ammunition, and light mountain guns where there are no roads, as the native soldiers can act as porters, while the Europeans compose the fighting force in case an enemy is encountered.

"All the commissioned officers are Europeans, and in each native company two of the four sergeants and four of the eight corporals must be Europeans; and some of them live in the barrack-rooms with the native soldiers. The European companies in each battalion have barracks separate from the natives, but close at hand; and whenever any of the soldiers of the native companies are sent on duty, they are accompanied by a proportionate number of Europeans. There is a difference in the pay and food of the European and native soldiers; but in all other respects they are treated as nearly alike as possible.

"There is a free school attached to each battalion for the education of both adults and children; the soldiers are urged to attend it, and their children are required to do so. Every officer of the battalion, whether commissioned or non-commissioned, who has any peculiar knowledge, is required to give it to the school; and any soldier of the battalion who has a talent for instructing can be appointed an assistant-teacher in the school, and be relieved from duties that are purely military—except in time of war. All soldiers, whether native or European, can have their wives and children with them, except when on active service in the field."

Fred thought the Java soldier had an easy time of it. Frank thought so too; and asked if he had any more privileges than those that had been named.

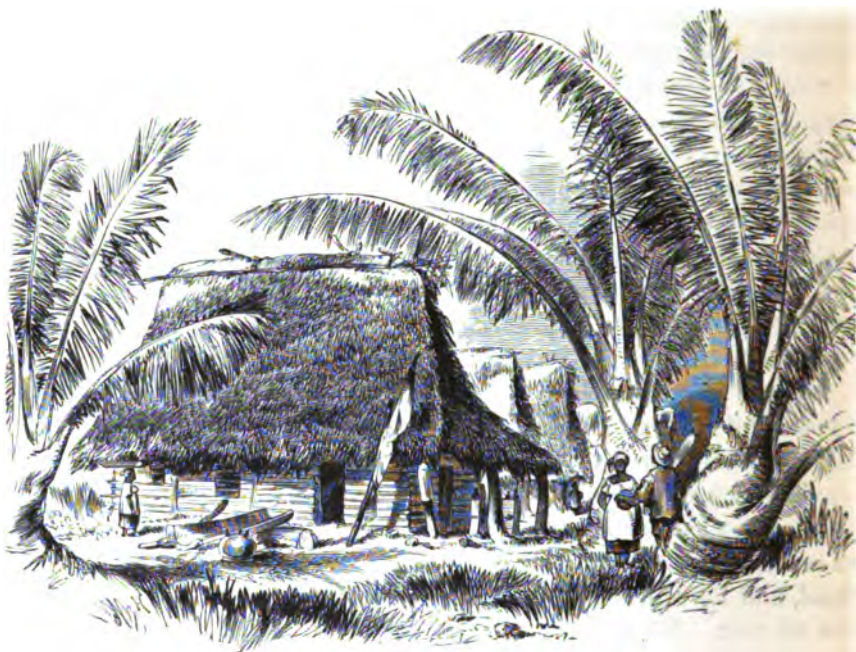
"Yes," was the reply; "there is the privilege of a house and garden."

"What!" said one of the boys, "a house and garden for soldiers in the army!"

"Certainly," responded their informant; "when a regiment is not quartered in the city, the soldiers are rewarded for good conduct by receiving a plot of ground near the barracks, with the privilege of building a hut. European and native are treated alike in this respect; and it has been found the greatest incentive to good conduct. The man spends his time with his family in the cultivation of his garden when he is not on duty—which is by far the larger part of the day. He returns to the barracks at night, and his family may remain in the hut or go with him to the military quarters.

"But I haven't told you how large the army of Java is. Ordinarily,

there are about twenty-five thousand men of all arms; but at present the number is greater, owing to the war in Sumatra, which requires an extra



REWARDS FOR GOOD CONDUCT.

force. The infantry is the most important branch of the service, and is composed as I have told you. The engineers consist of Europeans and natives mixed together in the same companies; the artillery has European gunners and native riders, and the cavalry are nearly all Europeans. There is a colonial navy with several gun-boats, which are generally occupied in seeing that the pirates throughout the Archipelago are kept in proper subjection. And there is also a militia force, which is only to be called on in emergencies: it consists of a cavalry and an infantry corps; and every European living in Java, whether Dutchman or other foreigner, must belong to the militia or the fire-brigade."

The boys thought this was a severe regulation; but they changed their minds when told that the militia-service was very slight, and a man might be a member of the fire-brigade for years without any call being made for his assistance. The Europeans in the interior are exempt from service, except in cases of special emergency; and those living in the cities are not often called upon. Englishmen and others have

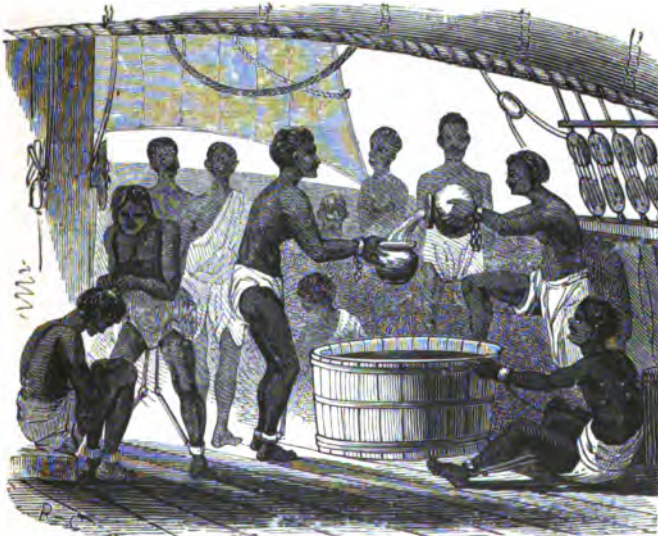
complained of the requirement to do militia and fire-brigade service, but are met with the reply which cannot be easily answered: "If you don't like the laws and customs of Java, you had better emigrate."

"The Dutch rulers of Java do not pretend they are occupying the country for any other purpose than to make money out of it. They never talk about their great mission of civilizing and enlightening the benighted people of the East, as the English do in India; and whenever anybody is disposed to find fault with them, they say to him without hesitation, 'If you don't like things as you find them here, you would do well to leave. The steamer will start for Singapore in a few days, and you are at liberty to take passage at once.'

"You must have a passport on landing in Java, or, if you have none, the consul of your country must vouch for you. You must get a permission to travel in the interior; it is very rarely refused, and only when the authorities are satisfied that you have the intention of doing harm."

Frank asked what it would be necessary to do in case he desired to remain permanently, and become an inhabitant of Java.

"You can stay here six weeks," was the reply, "without any formali-



PIRATE PRISONERS ON A COLONIAL GUN-BOAT.

ties beyond the ordinary permission of the police, which costs nothing. But if you want to live here you must apply for permission on a printed form, and have two householders of the place where you are to endorse

your application. If there is no objection to your staying, the desired document will be granted by the Governor-general, and the fees and stamps connected with it will cost you about forty dollars of American money."

"Does every foreigner who comes here to live have to pay forty dollars?" Fred inquired.



PASSPORT OFFICE.

"That is the law," answered his informant; "but the permission is never refused, unless the authorities suspect that the applicant intends to disturb the public peace, or when he is unable to obtain the necessary securities. The result is, that the foreign population of Java is of a better class than you find in most other parts of the East; the adventurers who have not a dollar in their pockets, and expect to make a living by

means more or less questionable, do not come here. The Chinese are very numerous in Java; more than a quarter of a million are settled here; but they are of a better class than the majority of those who go to San Francisco, and they give very little trouble to the authorities. The security is required to protect the government against the applicant becoming a pauper, and to vouch for his good behavior; but it has no reference to private debts, which are treated just like private debts everywhere else.

"The government also reserves the right to send anybody out of the country in case he becomes troublesome, even after he has received permission to reside here. The rule applies to a citizen of Holland the same as to any other foreigner, but it is very rarely exercised, and only when all other means of adjusting the difficulty have failed. The local governors have the power of ordering anybody to leave their districts, if he has been found guilty of treating the natives improperly, and the Governor-general may restrict the movements of any individual whenever he thinks the good of the colony requires it."

Fred wished to know if a foreigner could hold land in Java like any subject of the King of Holland, and was answered in the negative.

"What a monstrous injustice!" he replied.

Doctor Bronson laughed at his nephew's remark, and the latter turned towards him with an inquiring look on his face.

"You may not be aware," said the Doctor, "that an alien in the United States is unable to hold real estate, and I believe that the same is the case in Great Britain."

"In that view of the matter," said Fred, "Java is not so bad as I thought it was. But can a foreigner be naturalized here, as in England and America, and then hold property?"

"Certainly," responded the gentleman; "and the time of residence in Java before naturalization is the same as in your own country—six years. When he becomes a citizen, he has the same rights as a Dutchman, but until that time he labors under various disadvantages. The Dutch theory is that all the good things in Java belong to themselves, and if a foreigner chooses to live here and not become a citizen, he must be satisfied with any crumbs that happen to be lying around."

"I have before told you," he continued, "that the Dutch discourage all attempts of the natives to learn the languages of Holland and the rest of Europe, and are not inclined to teach them anything that is distinctively European. I know a native of high rank who went to Europe and spent several years there; when he returned he could speak Dutch, English, and French quite fluently, and was proud of his accomplishments.





ORDERED OUT OF THE COUNTRY.

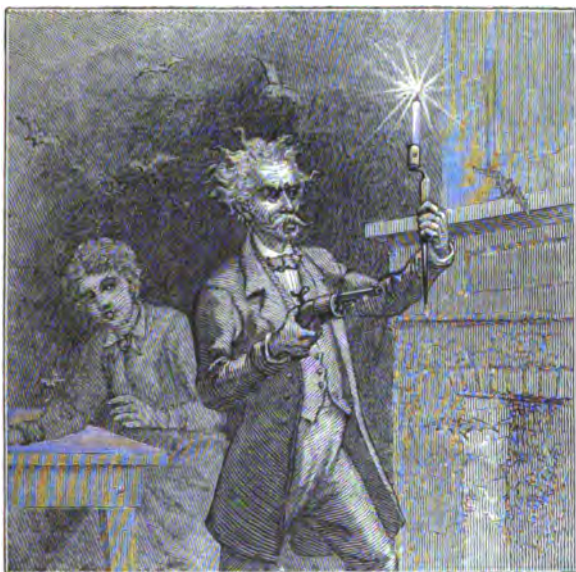
But he has told me that whenever he spoke to a Dutch official or to a private citizen in any European language, he was always answered in Malay, and if he tried to continue the conversation in any other than the latter tongue it was soon brought to an end. While the Dutch treat the natives kindly, and will not allow any imposition upon them, they are very particular about anything that would bring a European below a native. For instance, they will not permit a native to have a European servant, no matter how high the rank of the former, and how low the latter.

“No native would dare to drive out with a European coachman on any of the public streets, nor with a European on the front seat of his carriage, while he occupied the back one. If a European soldier or sailor becomes drunk in public, he is instantly arrested by the police, in order that his conduct may not degrade the white race in the eyes of the natives. Several years ago a native regent obtained the consent of a Dutch girl to marry him; her family was poor, and her social rank was low, but when he asked the permission of government for his marriage it was promptly refused, and he was dismissed from his office.

"The Dutch idea in this whole matter is that the Oriental never respects his equals, but only his superiors. Consequently they hold that in all social relations they can best serve their own interests and those of the natives by holding themselves to be the superiors, as they are by right of conquest. At the same time, they endeavor to give the native no cause of complaint against them. If a Dutch master maltreats a servant, the latter can have his wrongs redressed in the nearest police court; and if the master is found guilty, he is subject to a heavy fine. A merchant who endeavors to defraud a native is in hot water very speedily; and if he becomes notorious for attempts to enrich himself by this kind of dishonesty, his troubles will increase at a very rapid rate."

"But if one foreigner attempts to cheat another," said Frank, "does the government feel called on to interfere?"

"That is quite another affair," was the reply; "commercial matters between foreigners are exactly like the same transactions in other countries, and the courts exist for the administration of justice, the enforcement of contracts, and other contingencies of trade, in Java as in England and America."



NO ADMITTANCE.

## CHAPTER XXIX.

## A POST RIDE IN JAVA.—FROM BUITENZORG TO BANDONG.

AS soon as they had exhausted Buitenzorg and the sights of the neighborhood, the Doctor suggested to Frank and Fred that they should make a journey into the interior. They had not time to undertake the tour of the whole island, but they wished to go beyond the line of the railway, and learn by practical experience about the system of posting for which Java was famous.

Before the introduction of railways Java was supplied with excellent roads from one end of the island to the other, which were begun by Marshal Daendels in the early part of this century, and continued by the Dutch rulers since 1816. Then there are numerous cross-roads, so that nearly all parts of the country are accessible by wagon or carriage. On the principal routes the lines are double, one being intended for carriages and horses, and the other for cattle. The cattle roads are like the ordinary country road in America; but the carriage-way is macadamized, and admits of rapid travelling. On the whole, the system is quite as good as that which prevailed in Europe before the establishment of the railway; and when it is remembered that the interior of Java is very hilly, and cut up with numerous streams, the magnitude of the work which has been accomplished under the equator will be more readily understood.

The arrangements for posting were made with the assistance of the landlord of the hotel, who told them that it might take a day or two to find a carriage that could be hired. The Dutch and other foreign inhabitants generally own the carriages in which they travel; and when a stranger wishes to traverse the island, it is customary for him to buy a carriage, and sell it on reaching the end of his journey. When you want to buy a carriage, you find the vehicles are scarce and dear; and when you want to sell, the market is glutted with them. A good carriage for posting will cost between three and four hundred dollars; and if it can be sold at a loss of one hundred dollars when the traveller is done with it, he may consider himself lucky.

The journey that our friends intended to make was to last less than a week, and they hired a carriage for which they were to pay twenty-five dollars for that time, and be responsible for any damages that might happen to it. Frank thought the owner would make a good business if he could find steady occupation for his vehicle at that rate; but the landlord informed him that the carriages were idle more than half the time, and sometimes there were weeks together when no customer appeared.



STARTING ON THE JOURNEY.

Early one morning the conveyance drew up in front of the hotel, and the three travellers entered and took their seats. The carriage was a very comfortable one, with seats for four persons inside, a dickey or servant's seat behind, and a box under the coachman where baggage could be stowed. There were four horses, harnessed in European style, with a coachman dressed in white, and wearing a hat that reminded the boys of Japan and China. There were three footmen or grooms, who ran along-side the carriage to whip the horses, and make themselves generally useful; and when everything was going well they rode on a standing place intended for them on the rear of the vehicle. Frank observed, as the journey continued, that these fellows were the most accomplished

whip-crackers in the world; and Fred remarked that the best ring-master in an American circus would hide his head in shame, if he should listen to them for a few minutes. He understood the trick of the business when told that the footmen practise whip-snapping from boyhood, and at one station where they changed horses there was a man engaged in teaching a group of boys the principles of the art. He had a practical way of instructing them, as he followed each failure with a crack of the whip on the boy's shoulders.

There was some trouble at starting, as the horses were fresh and in-



BY THE ROADSIDE.

clined to be "balky," and one of them indulged in a private kicking-match that did not promise well for rapid progress on the journey.





LODGINGS OF THE STABLE-MEN.

However, the performance did not last long; and when they were under way they rattled along in fine style.

Posting in Java is expensive, as the hire of teams and drivers is nearly a dollar a mile. Then the drivers and footmen expect gratuities at the end of their journey, and there are other fees to be paid at several places. In return for this high price, the service is excellent. Notice must be given beforehand, and the time of starting must be fixed. A courier is sent along to all the stations, and when the carriage arrives where the relay is to be taken, the new horses are found ready harnessed and waiting, so that the delay does not occupy more than two or three minutes. The stations are from five to seven or eight miles apart, and the teams go at the greatest speed. At each station there is a native official, and sometimes a European one; and there are plenty of drivers, runners, and attendants, who sleep and wait in open sheds in the rear of the stable.

At each station there is a large shed extending over the road, and connecting the stables on each side. The carriage halts under this shed, so that the traveller is protected from the heat of the sun in dry weather, or the moisture when it rains. There are the facilities for making a lunch at nearly all the stations, as the keeper can supply hot water for tea and coffee, and a liberal quantity of milk and fresh eggs. With these things, and some cold chicken or other meat from the stopping-place of the previous night, a slice or two of bread, and the fruit that abounds everywhere, the traveller must be very fastidious if he cannot satisfy the hunger which the ride through the pure air of Java is sure to give him.

The journal of the expedition was kept by the boys, with occasional suggestions from the Doctor. Every moment that they could spare from sight-seeing was devoted to the history of their journey in Java; and during their halts at the stations, some of the keepers thought the two youths were inspectors sent out by the government to report on the condition of the postal-service, as they made such vigorous use of their pens. One station-keeper was extra polite, and brought out a bottle of schnapps in their honor; their prompt refusal of the proffered courtesy confirmed his belief in their inquisitorial character, though it raised doubts as to their genuineness as Dutch officials. "But they are yet very young," he remarked, with a shake of the head, as the carriage drove away; "they will not refuse schnapps when they grow older."

We will make a few extracts from the journal, which subsequently gave much delight to the Bassett and Bronson families:

"We are having a jolly ride through Java, and shall be very sorry when it comes to an end. It is hot in the middle of the day, but delicious at other times; and anybody who could not enjoy this sort of travel must be very hard to please. Some of the way we have made ten miles an hour, and the little horses come in smoking and panting

when we get to a station, and are ready for a change. The horses are mostly Java ponies, but there are many from the island of Celebes, and other parts of the Dutch East Indies. They are tough little animals, about twelve or thirteen hands high, and capable of great endurance; and the consumption of horse-flesh is so great, that enough of them are not raised in Java to supply the demand.



JUST IMPORTED.

"When we left the hotel at Buitenzorg this morning, we took with us the materials for our breakfast, so as to save the delay of having it prepared at one of the inns. We stopped at the second station on the

road, and were as hungry as one could wish; and when we pointed to our basket and motioned that we wanted to eat, we were referred to a shop kept by a Chinese, close by the post-station. We went there, as the shop

had better facilities for our meal than the station; John was all smiles, and showed us to a table in the middle of his front room. He was married and settled in the country, as he had a Javanese wife; and there were two or three children, with Javanese complexions and Chinese eyes, playing around the door. And what do you think we found in his shop to remind us of home?

"We wanted something to piece out the provisions we had brought from Buitenzorg, and so we examined the shelves of the establishment. The first thing we fell upon was a can of American oysters, with the familiar name of the firm that packed them. Then we found a can of peaches and another of pigs' feet, and we kept on with our inventory of things from our side of the world till we had a dozen or more of them on our list. With the oysters and the peaches to add to the stock from the hotel, we made a capital breakfast, and went away happy. We had some difficulty in paying our bill, as we could speak no common language. John finally set the matter right by counting out from his box the money we should pay, and spreading it on the table before us; we put down a similar amount, and he was satisfied. He ought to have been, as I am sure he cheated us; but then those who travel in a country where they do not speak the language must expect to pay for their ignorance.

"We have met people on horseback and in common wagons; and in several instances the men on horseback were followed by coolies carrying baggage. We are told that is the way the young men who wish to avoid expense travel in Java—as the cost of horse and coolies is less than a twelfth of the expense of posting. They also have palanquins for the cross-roads, though not on the great highways; but they are not suited to people who wish to get over the ground rapidly. Posting is by all odds the most rapid way of travelling, but at the same time it is terribly dear.

"We find that many of the roadside shops, near the stopping-places, are kept by Chinese; and the Chinese really seem to have a great deal to do with the business of Java. A gentleman at Buitenzorg said that the Chinese had a large amount of property in Java, and they could hold real estate like anybody else as soon as they became citizens. He said there were half a million Chinese in Java, and, as the government compelled everybody to pay nearly forty dollars on coming here to live, they had a better class of Chinese than we have in America. The Chinese have established several branches of manufacture in Java like those they have at home; and the gentleman showed us some enamel-work which he said was made in Batavia by Chinese workmen. We have certainly

never seen anything finer than this, and I doubt if they produce anything in Canton or Peking that can surpass it.

"In spite of the high price of posting in Java, it is said that the business does not pay. The government is at a heavy expense to maintain the roads and stations, and to keep the service in proper order. The argument of the government is that it is of the greatest importance to keep the means of transportation and travel in the best possible condition; and though it may not pay of itself, it is of great advantage indirectly. They have certainly spent enormous amounts of money on their roads and posting system; and they are too shrewd to continue to throw away their cash on an unprofitable enterprise.

"The road rises steadily from Buitenzorg, though there are several places where we were able to gallop our horses, and go along at the best possible pace. After the second station we found ourselves in the mountains; and the way was so steep that we had seven horses instead of four for some miles. Then we came to a place where it was necessary to put oxen ahead of the horses to help them up the hills, which were so steep that we could only go at a slow walk. We perceived that the air was colder; and on some of the mountains we thought we could see snow, but were not sure. In the highest parts of the country ice forms in the coldest nights, but never to more than a slight thickness,



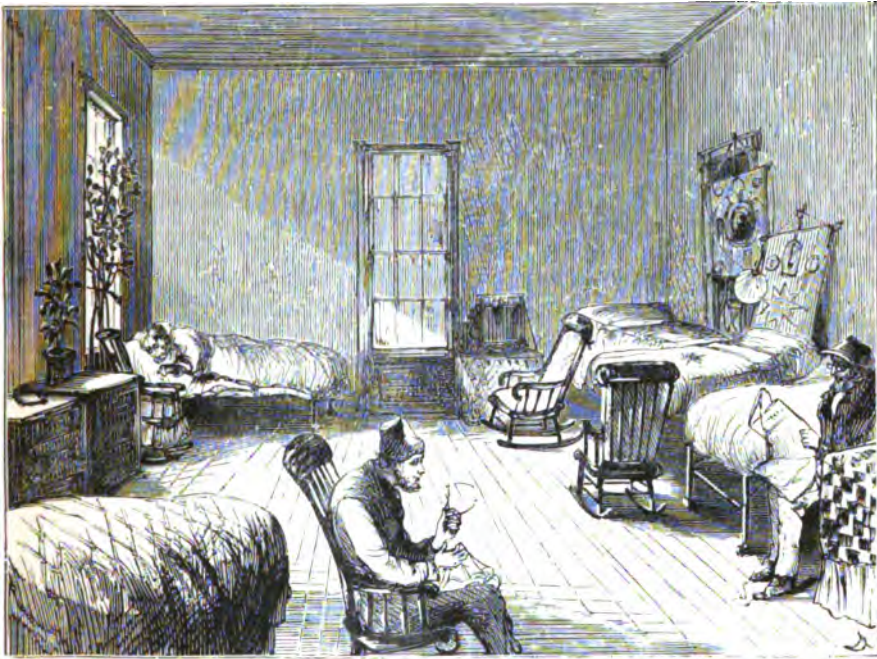
THE WAITER AT SINDINGLAYA.

and only a few times in the course of the year.

"We reached a point which was said to be two thousand five hundred feet above the sea, and then had a descent of a few miles to Sindinglaya, where we found a very comfortable hotel. We had a good dinner here—at least good for Java. The cooks of Java are not the best in the world, if we are to judge by what we have seen on the road. The government has established inns every forty or fifty miles along its principal roads; they are in charge of Europeans, who receive a salary for keeping the place in proper condition, at a scale of prices which is posted in every room, and is not at all unreasonable. Our waiter was a little Malay boy, who moved around as gracefully as a queen, and twice as dignified.

"There is a sanitarium or health resort at Sindinglaya, where the gov-

ernment sends its officers when they suffer from fever, and need to be restored by the cool air of the mountains. In addition to the official



SLEEPING-ROOM IN THE SANITARIUM.

one, there are several unofficial hotels; and a good many Europeans living in Batavia endeavor to spend a few weeks there every year for the sake of their health. The situation is charming, as it is quite surrounded by mountains, and anybody who is fond of climbing can have abundant enjoyment and exercise during his residence in this spot.

"We rattled on over the same excellent road, and passed a goodly number of villages that presented a very pretty appearance. They are laid out in regular streets in most cases, and the houses are generally surrounded with trees that almost conceal them from view. The dwellings in these villages are always of a single story in height, and their roofs are covered with thatch or red tiles. Each house stands in a yard, or 'campong,' by itself, and is enclosed by a hedge sufficiently thick and high to keep out all intruding cows or other animals. The hedge is neatly clipped, and frequently covered with bright flowers; besides the dwelling of the owner, the enclosure generally contains several store-houses for grain, and a stable with a brick floor. In some places these



villages seem to extend for miles, and tell more plainly than words that the country is thickly peopled and prosperous. When the Dutch first came here, the villages were dirty, and it was difficult to teach the natives any habits of cleanliness. Finally, the new rulers made a law requiring every native to keep his grounds clean, and his house properly swept and in order, under penalty of a fine; and they also announced that the character of a chief or regent would be rated according to the condition of his villages. It did not take long for the natives to learn the advantages of cleanliness; and now it is said that there is no occasion for the law, as they voluntarily give much time and attention to the improvement of their houses and gardens.

"We reached Bandong, about a hundred miles from Buitenzorg, without the slightest accident or delay. The road is level for a good part of the way as Bandong is approached; there is a wide plain here, about two thousand four hundred feet above the sea, and surrounded by high mountains. Java contains three of these plains—Bandong, Solo, and Kediri—and they are wonderfully fertile. There is an immense quantity of rice raised here, and some say that Bandong is the best rice-growing district in Java; at all events, we have seen nothing like it.

"We were constantly attracted by the beauty of the scenery, which cannot be described in words. At one place there was a cascade tumbling down from the mountains, and it was so pretty that we stopped the carriage to admire it, and make a sketch that would preserve its outlines. The foot of it was lost in the spray that rose like a cloud, and at one point where we stood the water seemed to be pouring from the sky. In the dry season this fall disappears altogether, but when the rains are abundant it has a full supply of water—a very necessary adjunct for a cascade.

"As we passed through the villages, groups of children stared at us, and occasionally an urchin turned a somersault, in the hope of securing a few coppers in recognition of his activity. Sometimes these children were very scantily clothed, and occasionally there was one carrying a baby, nearly as large as himself, in the fold of a shawl wound round the shoulders. Several times we threw them some money, and it was interesting to see them scramble for it. They are very active, sprightly little fellows, and when they jumped into the dusty road they made a cloud that almost hid them from view.

"Bandong, the town, is a pretty place, with wide streets finely gravelled, and kept in the best order. There are cocoa-palms and other tropical trees along each side of nearly every street, and they are so numerous,



A MOUNTAIN CASCADE.

and their foliage is so thick, that when you look down a street you can hardly see a single house. The houses are like those already described; and as they spread over a large area, they give you an impression that the inhabitants of Java are unwilling to be restricted in elbow-room.

“The Regent of the district resides here, and so does the Resident, as the principal Dutch official is called. As before explained, the Resident holds a higher rank than the Regent; but he is the only person who does, and all the orders for the government of the natives come from the Regent and his officers. The Regent is appointed by the Dutch, but he

always belongs to the most powerful noble family in the region where he is to serve, and he holds office for life, unless removed for improper conduct. The Regent of Bandong is the son of the prince who ruled here before the Dutch conquest, and who accepted the appointment of Regent, which he held till his death. He is very rich, as he has a share of the revenue from the rice grown in Bandong, and he lives in splendid style. He has a European house, where he entertains foreign guests; and close by it is his Malay residence, intended only for himself and family, and for Javanese visitors. Foreigners are admitted very rarely to the native palace, but those who have been there say it is luxuriously furnished in truly Javanese style. The Regent is on the best of terms with the Resident, and they often go out together to the races and on hunting excursions; the Regent frequently gives parties in his European house, and on such occasions all the foreigners in the town and vicinity are invited, and are treated with the greatest civility."



JAVANESE BOYS.

## CHAPTER XXX.

## VISITING A TEA PLANTATION.—PREPARATION OF TEA.

WE will continue to make extracts from the journal kept by Frank and Fred concerning their journey in Java.

“We have already told about the coffee that is grown in Java, and how it is sold on government account. Some of the finest coffee estates on the island are in the Bandung district, and nearly all of them are at an elevation of two thousand feet and more above the sea. Coffee will not grow to any advantage in the lowlands near the coast, and very little of it is cultivated there. It needs a high altitude, and some of the plantations are four thousand feet up in the air. Above the last-named elevation tea takes the place of coffee; and it has been found in the last few years that tea will grow in Java on the tops of the highest mountains, provided there is sufficient soil for the roots of the plant to find a holding-place.

“We have been to a coffee estate about ten miles from Bandung, and spent a day there very pleasantly. As before stated, the coffee-trees are cultivated, and the berries gathered, by native laborers under foreign supervision; the process of separating the bean from its husk has been described, and so has the system by which the government buys the coffee from the native producer, and makes a handsome profit on the investment.

“Our ride to the plantation was a slow one, as we had an uphill road most of the way, and our horses were assisted by oxen. We met several trains of coffee-carts coming down to the plain on their way to the railway terminus; it is fortunate that the coffee is carried down rather than up hill, as its cost in the latter case would be enormously increased. A cart carrying from one thousand to one thousand five hundred pounds of coffee can be easily drawn by a pair of oxen coming down the road, while the same beasts have all they can do to take the empty cart home again. As the carts wound through the tropical forest, they presented a very picturesque appearance with their barefooted drivers, and occasionally we





TRAIN OF COFFEE-CARTS.

could see the black eyes of a Javanese woman peering out from under the matting that sheltered the bags from sun and rain.

"The gentleman who had charge of the plantation we visited wished us to stay a few days



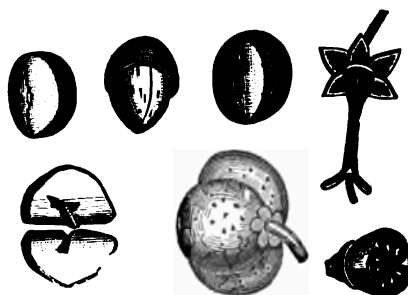
and indulge in a deer-hunt, but we could not spare the time. Deer are numerous in this part of the island, and those who are fond of sport can have an abundance of it if they are in Java in the right time of the year. If you want larger game than deer, you can hunt the rhinoceros and wild bull; and if you want savage brutes, that die hard and fight to the last breath, you can chase the wild-boar. They have tigers in Java, but not so many as in Malacca, and they do not do so much damage to the people, for the reason that they have plenty of game to live upon.

"We had an opportunity to visit a tea plantation, and gladly embraced it, as we wished to see something of the process of raising tea and preparing it for market.

"Most of the tea plantations in Java are on government lands, which are leased to contractors for terms of years—rarely less than ten, and not over twenty. At the beginning of the enterprise the government made cash advances to the contractors, so that they could have the necessary capital for clearing the land and starting their crops; these advances were to be repaid in tea at prices that would give large profits to the contractors, and on this plan a good many plantations were started about forty years ago.

"The government imported skilled workmen from the tea districts of China to instruct the natives in the business, and it also imported a large supply of tea-plants and tea-seed. For the first few years the enterprise was a doubtful one, but after a time it began to pay handsomely. The cost of making the tea was about fifty cents a pound; and as the processes improved, and the character of the tea grew better, the selling price rose till it reached eighty or ninety cents. At these rates it does not take a great deal of study to show that money can be made by raising tea in Java, and the applications for leases of land have increased every year.

"The first thing the tea-planter has to do after getting possession of his lease is to clear the land and get ready for planting. This is no small matter, as the forest must be removed, and the soil thoroughly broken up. The outlay for this is considerable, and not much unlike clearing up a farm in New England, or in the backwoods of Canada. Then the young plants are set out; after this has been done, the ground must be kept clear of weeds, just as in raising corn or potatoes. It must be frequently



SEED-PODS OF THE TEA-PLANT.

stirred, so that the plant can get as much nourishment as possible from the earth, and when this is done the planter has the satisfaction of seeing the bushes grow with considerable rapidity.

"We walked through the fields where the plants were growing, and found them of different ages and sizes. If we had not known where we were, we might have thought we were in a field of English myrtle-bushes, as the tea-plant is much like the myrtle in general appearance. It grows from two to six feet high, and has white blossoms that resemble small dog-roses.

"One of us asked which were the plants that produced green tea, and which the black. The owner of the plantation smiled, and said there was no difference.

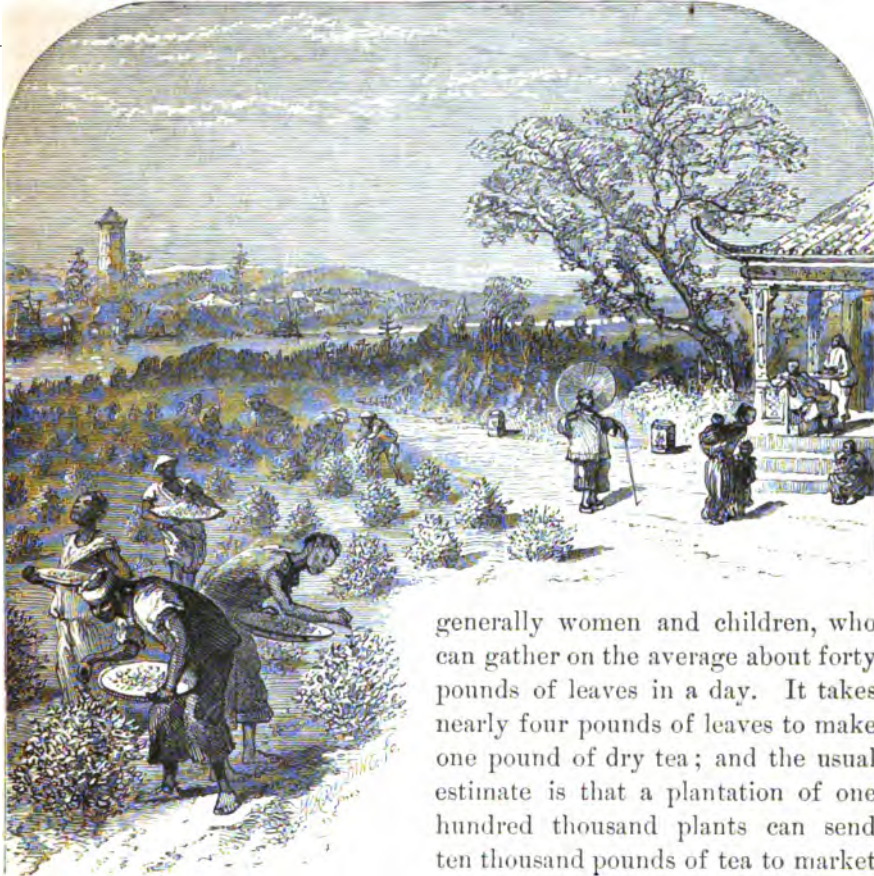
"We laughed at our ignorance, as he explained that the difference of the teas was entirely owing to the manipulation. We asked why it was that some districts in China produced only green teas, while others were reputed to make none but black; and he told us it was because the workmen in those districts had been accustomed to follow only one form of manipulation.

"It takes three years, he said, to get a plantation in condition to produce tea. The seeds are sown in a nursery-bed, and the young plants are not ready to be set out till they are a year old. They are then about nine inches high, and covered with leaves; and the first crop is taken when they have been growing two years in the field. The leaves are the lungs of the plant, and it would die if all of them were stripped off. Consequently only a part of them are removed at a picking; and if a plant is sickly, it is not disturbed at all. The plants will last from ten to twelve years, and are then renewed; and on all the large plantations it is the custom to make nursery-beds every year, so that there will be a constant succession of new plants for setting out in place of the old ones.

"At the first gathering the half-opened buds are taken, and from them the finest teas are made. Then they have another gathering when the leaves are fully opened, and then another and another, till they have five or six gatherings in the course of the year. Each time the leaves are coarser than those of the previous gathering, and consequently the tea is not of so fine a quality. A well-managed plantation produces all kinds of tea; and it was a wise requirement of the Dutch government, when they started the tea-culture in Java, that the planters should produce proportionate quantities of both black and green, and not less than four qualities of each.

"The gathering takes place only in clear weather; and for the best

teas the picking is confined to the afternoon, when the leaves are thoroughly dry, and have been warmed by the sun. Only the thumb and forefinger are used in plucking the leaves from the bush; the pickers are



GATHERING TEA-LEAVES.

generally women and children, who can gather on the average about forty pounds of leaves in a day. It takes nearly four pounds of leaves to make one pound of dry tea; and the usual estimate is that a plantation of one hundred thousand plants can send ten thousand pounds of tea to market in the course of a year.

“Different kinds of tea require different treatment, as we have already seen. For green tea the leaves are roasted as soon as they have been gathered, and are then rolled and dried; but the leaves intended for black teas are spread on bamboo trays five or six inches deep, and placed on frames where they can have plenty of sun and air. They remain here from noon till sunset; and if the weather is damp they are further dried by artificial heat. For this purpose they are placed on frames over shallow pans containing burning charcoal, and are tossed and stirred with the hand until they emit a cer-

tain fragrance. The heat should be very slight; and the frames are made so high that it is necessary for a man to mount a small ladder in order to reach the trays.



DRYING TEA IN THE SUN.

“The sense of smell in the skilful workers of tea is very acute, and they can tell, to almost a minute, the exact time when the drying should cease, and the next process begin. The Chinese workmen are better than any others for this branch of the business, and on many plantations the most of the manipulation is performed by Chinese, though their labor is more expensive than that of the Malays. Our host showed us through his factory, where the men were busy in the various processes;

and as he told us about each step of the business, he took us to the department where that particular work was going on.

“After showing the leaves spread out on the frames, he led the way to a sort of stove, where a man was manipulating some tea in a pan over a charcoal fire.

“‘This is what we call roasting,’ he said, ‘and the great object of the roaster is to dry the leaves without burning them. You see he does not allow them to be quiet a single instant, but tosses and turns them in all directions, so that none may stick to the bottom of the pan, which they might easily do, owing to the moisture they contain.’

“We watched the roasting till we thought we understood it well, and as the place was hot we did not care to stay there a great while. The leaves lose their fragrance when first thrown into the roasting-pan, and give out a rank smell, but they gradually recover their perfume, and are ready for the next process, which is called rolling.



DRYING OVER CHARCOAL.

“The tea from the roasting-pan was given to a couple of men, who stood in front of a table or bench, with bamboo mats before them. One had a large mustache, the largest we had ever seen on a Chinese face, and the other consoled himself for the absence of that hairy ornament by smoking a pipe.

“The roller takes as much tea as he can cover with both his hands, and places it on the mat in a sort of ball. He keeps them closely together, and rolls them from right to left; this motion gives each leaf a twist on itself, and rolls it so firmly that it retains the shape when dry. This part of the work requires peculiar dexterity, and can only be per-



ROASTING TEA.

formed successfully after long practice. When a man becomes skilful in it, he can roll the tea with wonderful rapidity; and when his work is done, every leaf will be found separate from all the others, and twisted as though it had been passed through a machine.

“The work of rolling the tea is very tiresome, and so the men sometimes perform it with their feet when they wish to give their hands a rest. We saw one man at his occupation in this way, and he certainly seemed to enjoy it. His bamboo mat was on the floor, and he had his trousers raised so that his legs were bare from the knee down. He rested his arms on a pole, and kept his feet moving over the handful, or rather



footful, of leaves he was endeavoring to roll out. Our host picked up some of the tea, and showed us that it was perfectly prepared, and quite

acceptable in every way. The man's toes were much more slender than toes usually are, and it is doubtless due to the fact that he has used them a great deal, and never cramped them into tight-fitting boots.



HANDY WITH HIS FEET.

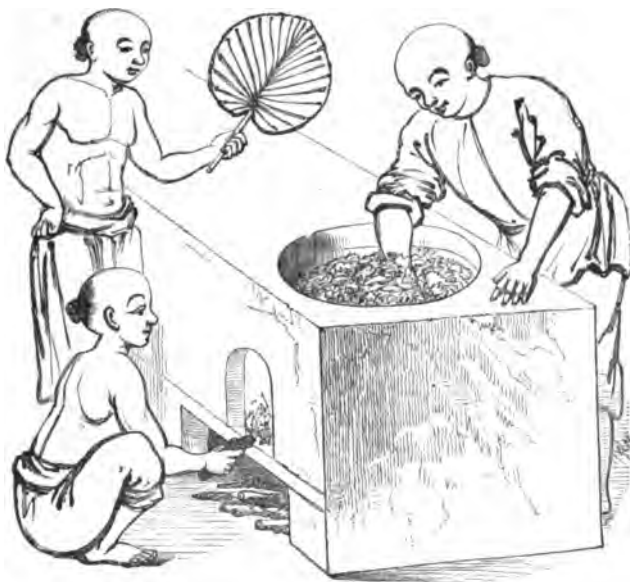
"After they have been properly rolled, the leaves are spread on trays, and exposed to the sun and air for several hours, and then they are once more roasted. The second roasting is milder than the first, and is done over a slower fire; and afterwards the leaves are rolled again, to make sure that none of them have become spread out. For the black tea the roasting is done in a shallow pan, the same as the first; but the green teas

are put in a deep pan, and subjected to a very high heat.

"While the green tea is being roasted, there must be a great deal of care on the part of everybody concerned. The pan is nearly red-hot when the tea is put into it, about a pound at a time, and the operator in charge keeps it in rapid motion. One boy tends the fire, while another stands by with a fan, to prevent the burning of the tea.

"After their final roasting, the teas are put in a long basket, shaped like an hour-glass, and having a sieve in the centre. This basket is placed over a charcoal fire and submitted to the heat for several minutes, when the tea is poured out and receives another rolling. This operation is repeated several times, till the tea is thoroughly tired of it, and also thoroughly dry. Then it is passed through sieves, to separate the different qualities from each other; and finally it is winnowed, to remove all the dust and dirt. Then it is 'fired,' or dried once more, to drive away the last particle of moisture; and in this condition it is ready to go into the chests in which it is carried to the lands where it is to be used.

“There, we have told you all about the preparation of tea, which we could not do in China for the reason that we did not go into the part of the country where they produce the tea. China is not the only country where tea is made, though it once had the monopoly of the business. A great deal is grown in Japan, as you know, and now you have learned about the tea-growing in Java. They say that ten million pounds are grown in Java every year, and the product will increase to double that amount in less than twenty years. About the time the culture of tea was introduced into Java, the East India Company tried it in India; and now the production of tea in that country is so large that the English hope,



ROASTING GREEN TEA.

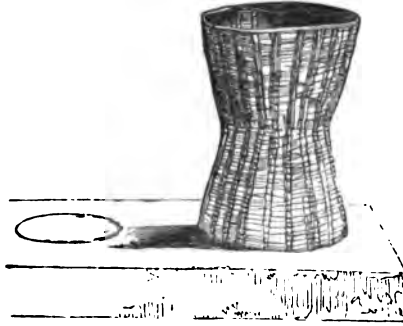
before the end of the century, to supply the whole of their home market with Indian teas. We shall see.

“The Java teas have a sharp, acrid taste, and are not suited at all to the American palate. None of them go to America, or, at least, only a few chests every year, and for some time Holland was the only market for them. Gradually their sale extended to Germany, and now it is said there is a demand for them in London.

“We tasted some of the tea, and found that it resembled what is called ‘English breakfast,’ only it had a stronger flavor. It is said that it is worth much more than Chinese tea, for the reason that a pound of it



uct the high price of labor made it unprofitable. When we can furnish labor for the same price that it can be had in China, Japan, Java, and India, we can compete with those countries in growing tea, but until that time we had better let the business alone.' ”



ROASTING-BASKET.

## CHAPTER XXXI.

## EASTERN JAVA, LOMBOCK, TIMOR, AND THE ARU ISLANDS.

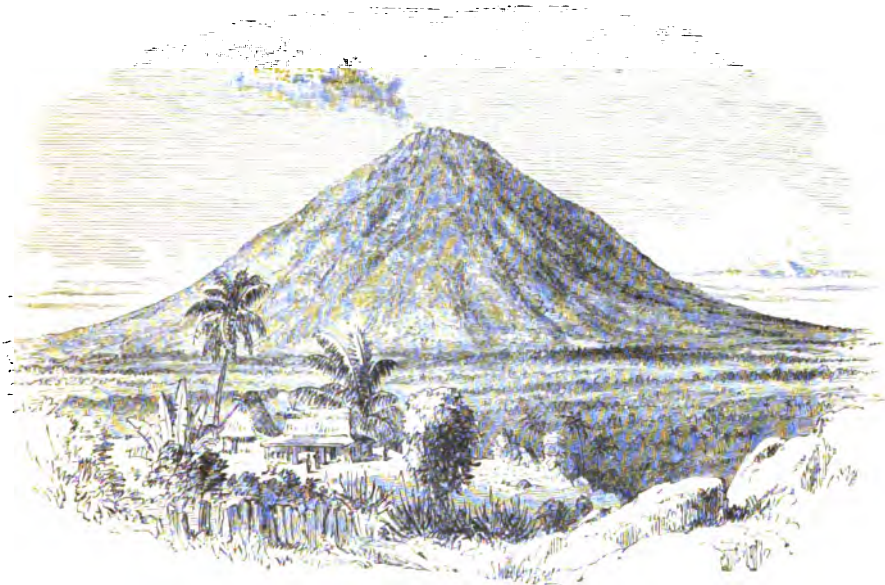
GREATLY pleased with their visit to the tea and coffee plantations, our friends returned to Bandung. On the way back they had an accident that for a few moments was quite exciting, and threatened serious results. While descending a long hill the brake of the carriage gave way, and the horses started on a full gallop; they were quite out of the control of the driver, and the two footmen were left a long way behind. The driver managed to turn his team into a side road at the risk of an overturn, and gave them a little practice in running up hill instead of down. Gradually they reduced their pace, and some workmen in a field close at hand came to his assistance, and held the horses till the grooms could come up. One of the springs of the carriage was broken, in the severe shaking they had received, but otherwise the vehicle was not much injured.

It was necessary to stop a day at Bandung to have the carriage repaired, and the delay enabled the boys to learn something more about the country.

They ascertained that, if they had the time to spare, they could go to the eastern capitals of Java along good roads, and through a succession of mountains and plains. They would see volcanoes, both active and silent, and might possibly have a practical acquaintance with an earthquake, or an eruption of one of the burning mountains. Frank was a little doubtful of the safety of such a journey when he learned that one volcano had thrown out, in a single night, ashes and scorix to the depth of fifty feet over an area of several miles, destroying forty villages and three thousand people; and another volcano had overwhelmed everything within twenty miles of it, and caused the deaths of twenty thousand persons. But the Doctor assured him that the eruption of a volcano was not so sudden that those who wished to get away could not do so, and the majority of the burning mountains of the world were accustomed to give warning weeks and sometimes months ahead.



The eastern capitals of Java are Samarang and Sourabaya, but they are capitals only of the provinces of the same names. Both of them are important commercial points; and there is a railway from Samarang which is intended in course of time to unite with the one from Batavia.



VOLCANO IN EASTERN JAVA.

Samarang is about two hundred and fifty miles from Batavia, or nearly half-way from one end of the island to the other; while Sourabaya is close to the eastern extremity, and not far from the island of Madura. The country around Sourabaya is quite flat, and very fertile; and the roads sometimes run for miles in perfectly straight lines. Back towards the interior, when the hilly region is reached, there is a magnificent forest, where tigers abound; and the hunter is rewarded by frequent shots at the beautiful Java peacock. The country is full of ruins of temples and palaces; and there are many evidences that it was once occupied by a people greatly advanced in architecture and the fine arts.

“But what should we find if we went beyond Java?” Fred asked.

Just as he spoke the door opened, and a gentleman entered. He proved to be their host of the coffee plantation, who had heard of their accident, and called to congratulate them on their escape from injury. After an exchange of civilities, he seated himself, and asked if he could be of any service; and, turning to Fred, he said,

"I heard your question as I entered the room, and think I can answer it. I have made the journey around the Dutch possessions in the East, and will try to tell you about them."

Both the boys expressed their delight at the chance of learning something of the islands of the Oriental Seas. The gentleman said he had an hour to spare, and would endeavor to enable them to pass it agreeably; and if they wanted to take any notes of what he said, they were welcome to do so.

They were desirous and ready, and he began at once.

"I have twice made the journey," said he; "once by steamer, and once by native boats."

"Do the steamers run there regularly?" one of the boys inquired.

"Certainly," was the reply; "the company whose ship brought you from Singapore to Batavia sends a steamer every month to make the tour of the Dutch East Indies. It leaves Batavia on the 15th of the month, and Sourabaya on the 22d; and goes to Macassar, Menado, Ternate, Boeroe, Amboina, Banda, and Timor, and then returns to Sourabaya and Batavia. The voyage takes about a month, and the steamer remains in each port from twenty-four to forty-eight hours."



RUINS NEAR SOURABAYA.

"What a delightful voyage it must be," said Frank; "and how much does it cost?"



AN ISLAND PORT.

"A ticket for the round trip," the gentleman replied, "costs three hundred dollars, and sometimes more. You have already found that steamship fares in the East are dear; and this line forms no exception to the rule. In return for your money you have all the comforts the ship can give; and you may live on board all the time she remains in port at the different stopping-places.

"If you go by a native boat you will be much longer on the way; but you can visit more places than the steamer stops at, and can see more of the life of the East. We will drop that part of the subject, and consider what you might see in some of the islands of the Malay Archipelago, supposing you should go there; we haven't time for all of them.

"The colonial possessions of the Dutch in the Archipelago comprise about six hundred thousand square miles, with a population of twenty-five millions. They include the whole of Java and Madura, the Moluccas, or Spice Islands, and large portions of Borneo and Sumatra. Consequently, you can make a long journey without once going out of the Dutch territory."



WILD FIG-TREE.

"The first place I visited, after leaving Sourabaya, was the island of Lombock. There is not much of interest in the principal port, which is called Ampanam, as the place is small, and the inhabitants are not particularly enterprising. There are some groves of wild fig-trees close to the town; and one of my amusements was to shoot the green pigeons and orioles that abounded there. Some of the trees are almost covered with the hanging-nests of the orioles; and, as they are rarely disturbed by the natives, I found them so tame that it required no skill at all to get near enough to shoot them.

"Several miles out in the country from Ampanam is the village where the Rajah of the island lives; it is called Mataram, and no native of



A VILLAGE IN LOMBOCK.

the lower classes is allowed to ride on horseback through it. If you should happen to be travelling there, and had your Javanese servant mounted on a horse, he would be obliged to walk from one end of the town to the other, and lead his animal.

"There is a fine volcano in Lombock, about eight thousand feet high. Mr. Wallace tells a good story in connection with this volcano, and the plan by which the Rajah took the census of the population of the island.

"You must know that the principal product of Lombock is rice, and the taxes are paid in this article. Each man, woman, and child contributed a small measure of rice once a year; but it passed through many hands before it reached the treasury, and a little of it clung to each hand that it touched. The result was that the Rajah did not get half of what was due him, and all his officers conspired to tell him that the crops were short in some districts, and many people had died in others; and no matter what he did to find out the truth, they managed to prevent his learning it. He determined to take a census of his people, but did not know

how to go at it, as his officers would suspect what it was for, and would make out the population according to the rice that he received the previous year. He thought a long time over the matter, and finally hit on a plan so shrewd that nobody suspected there was any census at all.

"For several days he appeared to be very sick at heart; and finally he called his officers together, and told them he had been summoned to go to the top of the great fire-mountain to hear a revelation from the spirit who ruled the island. The spirit had come to him in a vision, and said he must go there at once, or the island would be destroyed.

"Of course they made arrangements immediately, and a grand procession accompanied the Rajah to the designated spot. From the foot of the mountain to the summit he was escorted by a few priests and attendants; and as he neared the crater he ordered them to remain behind, under the shadow of a great rock, while he went alone to meet the spirit. He remained away for a long time: the fact is, he lay down and took a com-



VIEW NEAR MATARAM.

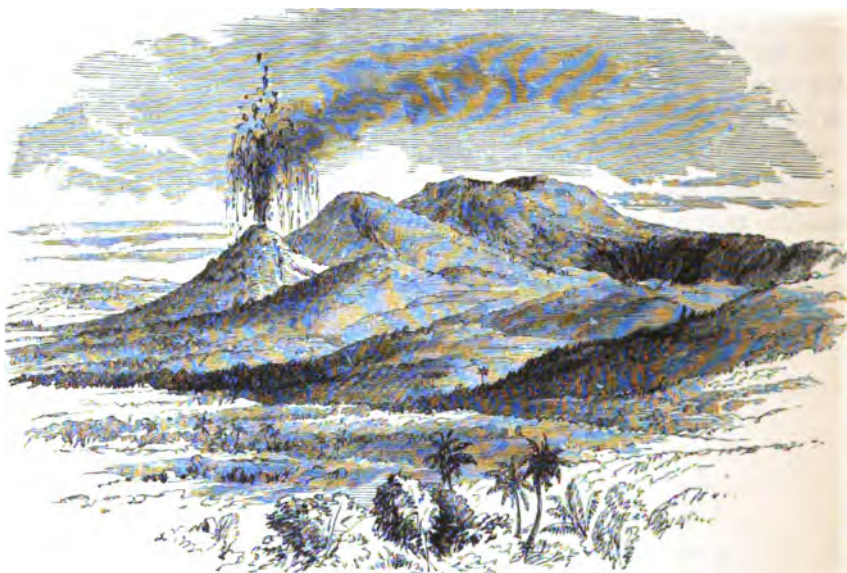
fortable nap, and it was naturally thought that the spirit had a great deal to say to him.

"When he returned he was silent and sorrowful, and did not speak a word for three days. Then he summoned his officers, and told them what



the spirit had said. He described the spirit as having a face of burnished gold, and a voice that sounded like distant thunder.

“‘Oh, Rajah!’ the spirit said, ‘much plague, and sickness, and fever are coming on the earth—on men, and horses, and cattle; but as you and



WHERE THE GREAT SPIRIT AND THE RAJAH MET.

your people have obeyed me and come to the mountain, and have been good and faithful, I will tell you how you can avoid the pestilence.

“‘You must make twelve sacred krisses; and to make them, every village and every district must send a bundle of needles—a needle for every head in the village. And when any disease appears in a village, one of the krisses shall be sent there: if every house in that village has sent the right number of needles, the disease shall cease immediately; but if the number of needles has not been exact, then all shall die!’

“So the princes and chiefs made haste to collect the needles; and they were very exact about it, for they feared that, if a single needle should be wanting in any case, the whole village would perish. When the needles were collected, the Rajah received them; then he had a workman come and make twelve krisses from those needles; but the papers that were around the needles, and told the name of each village, and the number of men, women, and children in it, he carefully preserved, and put away in his private chest.

"When the rice-tax came in that year, and the quantity fell short, the Rajah said to the officers that there was some mistake about it. He then told them the exact number of inhabitants in that village, according to the packages of needles, and it did not take long to set the matter right. The result was that the Rajah grew very rich, and his fame went out through all the islands and countries of the East."

"A capital story," said Frank; and the opinion was emphatically endorsed by Fred.

"It is evident," the latter remarked, "that the kriss, or dagger, is held in great respect in Lombock."

"Certainly," said the gentleman, in reply; "there is no part of the Archipelago where it is more honored, and where the wealthy natives have so much money invested in this weapon. Very often they have them with golden handles set with jewels; and I have seen some that cost thousands of dollars. Every man carries one of these knives, and frequently it is the only property he can boast of possessing. The blade is twisted; and when it is used it makes a frightful wound."

"That is what the Malays 'run a-muck' with, is it not?" Frank asked.

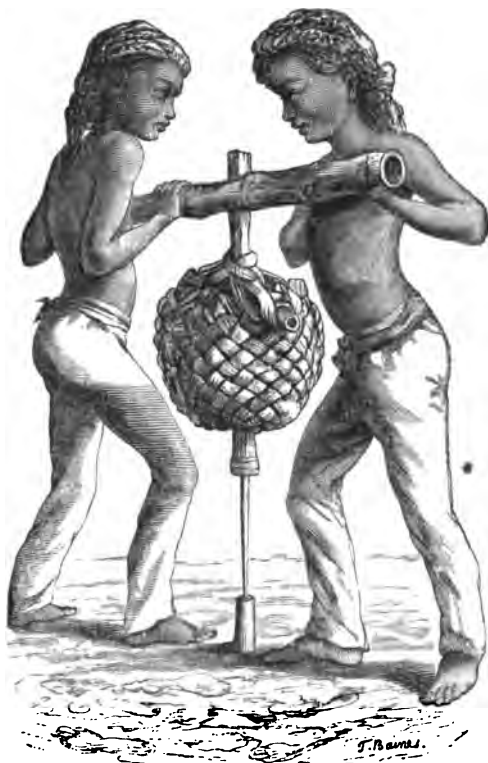
"Yes; and Lombock is one of the most famous places in the East for that amusement. The island, though close to Java, is independent, and the Rajah does pretty much what he pleases as long as he remains on good terms with his Dutch neighbors. The taxes are not heavy, but the laws are very severe. Small thefts are punished with death; and it is a rule of the country that a person found in a house after dark, without the owner's consent, may be killed, and his body thrown into the street, without fear that anybody will ask a question about the matter.

"The word 'amok' means 'kill;' and the Malays kill others in the expectation that others will kill them. Running amok is the fashionable way of committing suicide; a man grows desperate from any cause, and determines to put an end to his life, and to kill as many others as he can before he is killed himself. He grasps his kriss-handle, and stabs somebody to the heart; then he rushes down the street, shouting 'amok! amok!' and stabbing everybody he can reach. People rush on him with knives, spears, daggers, guns, or other weapons, and despatch him as soon as possible—as they would a mad dog. Sometimes five or ten persons are killed by the man before he is brought down; and I know one instance where sixteen were killed or wounded by a native running amok.

"The Malays are excellent workers of steel, and the weapons they make are difficult to surpass in fineness and beauty. The marvellous thing is that they will accomplish so much with the rudest implements:

a smith has a small forge, a hammer or two, and a few files, and with these and one or two other things he will turn out work that astonishes the skilled artificers of Sheffield. A Malay gunsmith produces weapons

that shoot with precision, and are bored with perfect accuracy; but the boring is done without any machinery whatever. This is the apparatus:



GUN-BORING IN LOMBOCK.

"There is an upright pole which is thrust through a bamboo basket; its top is fastened to a cross-bar, and the bottom is equipped with an iron ring in which boring-irons can be fitted. The barrel to be bored is set in the ground, the basket is filled with stones to give it weight, and two boys turn the cross-bar to make the boring-iron revolve. The barrel is bored in sections about eighteen inches long; and these are welded together, and afterwards bored to the required size.

"Considerably to the eastward of Lombock is the island of Timor, which is interesting because it is one of the few

places where the Portuguese have a local habitation and a name in the Malay Archipelago. Timor is about three hundred miles long by sixty wide, and is partly occupied by the Dutch and partly by the Portuguese. The Dutch settlements are at the western end, and their principal town is Coupang; it has a mixed population of Malays, Chinese, and Dutch, in addition to the natives, who are closely allied to the natives of Papua, or New Guinea, and have very little affinity with the Malay race. They are of a dirty brown color, and have large noses and frizzled hair, so that they strongly resemble the negro.

"The seat of the Portuguese part of Timor is at Delli, a miserable village of thatched huts, with a mud fort, and very little appearance of civilization. The governor's house is a trifle better than the rest, but

not much; and the place has a reputation for fever that is not at all agreeable for a stranger. I don't think much of Delli, and never heard of any one who did.

"The Portuguese government in Timor is a very shadowy affair, and



NATIVES OF TIMOR.

the sooner it comes to an end the better. It has been there three hundred years, and yet there is not a mile of road in the interior of the country, and the agricultural resources of the island have received no development. The example of the Dutch in Java seems to be quite lost on the Portuguese, who oppress the inhabitants in every possible way, and plunder them without fear of punishment."

Frank asked if Timor was one of the islands where the bird of paradise is found.

"No," replied the gentleman; "but it is not far from there to the Aru Islands, where the Great Bird of Paradise lives. I went from Timor

to Aru in a native boat, and narrowly escaped drowning on the way. We were caught in a storm, and anchored near a small island off the coast of Aru: the Malay anchor is a stick of wood from the fork of a tree, with a stone to give it weight, and, as it has only one fluke, you can never be sure that it goes down so as to seize the bottom. Ours bothered us so that we had to throw it several times, and when we finally got it to hold we were not twenty yards from the rocks where the wind was driving us.

"But a miss is as good as a mile, and we were safe on shore the next morning, very thankful at our escape.

"I had an opportunity to go to the forest to see the process of shooting the Great Bird of Paradise, and went at once. Quite a trade is carried on in these birds, and the skill of the natives is devoted to capturing them without staining their plumage with blood, or allowing the birds to injure it during their struggles.

"The birds have a curious habit, of getting up dancing-parties in the month of May, when their plumage is finest. They assemble before sun-



DELLI, PORTUGUESE TIMOR.

rise in a tree that has plenty of room among its branches for them to move about, and as soon as the sun is fairly up they begin their dancing. They elevate their plumes as peacocks display their tails, stretch their necks, raise their wings, and hop from branch to branch in a state of great excitement.





NATIVES OF ARU SHOOTING THE GREAT BIRD OF PARADISE.

"The natives hunt through the forest till they find a tree where the birds assemble. They go there in the evening and build a screen of leaves over the fork of the tree, and just before daylight they climb up there ready for business. They keep perfectly still till the birds are busily engaged in their dance, and then they shoot with blunt-pointed arrows. The bird is stunned and falls to the ground, and before he re-

covers he is seized by a boy who is waiting for him; the bird's neck is broken without injuring the skin, and thus the prize is secured without staining the feathers with blood."

Fred asked if, when one bird was shot, the rest did not fly away.

"Not by any means," was the answer. "They are so busy with displaying their feathers to each other, that they do not take notice of the disappearance of one of their number until they are greatly reduced. The morning I went out to see the business, I was stationed in a little bower about a hundred yards from the tree where the birds were, so that I could see all that went on. There were twenty-one birds there, all beautiful males, and they made the prettiest sight of the kind that ever came before my eyes. The natives shot fifteen of them, and finally one of the birds was not hit hard enough to prevent his screaming as he fell. The others then took the alarm, and in two minutes they were all out of sight."



A NATIVE ANCHOR.

## CHAPTER XXXII.

## WANDERINGS IN THE MALAY ARCHIPELAGO.—GOOD-BYE.

"THERE is an interesting point in the Aru Islands," the gentleman remarked, after a short pause, "known as Dobbo."

"It is not regularly visited by steamers, as it is out of the routes of travel, and for a part of the year it is almost deserted. In May and June it is filled to overflowing with a mixed lot of people from all parts of the East. There are Chinese in considerable number, who come to buy the articles brought to market by the inhabitants of the islands for a long distance; and there are men from Macassar, Timor, Ceram, and other parts of the Archipelago, as well as the natives of Aru, who belong to the Papuans I have already described. The town consists of a single street of mat-covered huts and sheds, with a lot of straggling buildings in the rear that are set down without any regard to order or regularity.

"I went to Dobbo in a native boat from Macassar. It was very much like a Chinese junk in general appearance, and about seventy tons burden, with a native crew of thirty men and a Javanese captain. Four or five of the men were slave-debtors of the captain, and the rest were hired, like the crew of a ship in Europe or America."

"Excuse me for interrupting," said Fred, "but let me ask what these slave-debtors are."

"Slave indebtedness," replied the gentleman, "is a system introduced by the Dutch, who borrowed it from the Chinese, for the protection of traders in these thinly-peopled regions. Goods must be intrusted to agents and small dealers, who frequently gamble them away, and leave the merchant unpaid. He trusts them again and again, with the same result; and finally, when he can stand it no longer, he brings them before a police court, where he establishes his claim. The magistrate then binds the debtor over to the creditor, and requires him to work out the account. The plan seems to answer very well, as the creditor is secure so long as the debtor lives and has his health; while the debtor does not consider himself disgraced, but rather enjoys his relief from responsibility."



GREAT STREET OF DOBO IN THE TRADING SEASON.

"But it is a system of slavery," Fred answered; "though, after all, it is more sensible than the European practice of locking a debtor up in jail, where he can earn nothing, but is a constant expense to himself and all others concerned."

"A good deal depends on the character of the master," was the reply. "Some masters get along very pleasantly with their debtors—allow them to trade a little on their own account—and associate with them on equal terms. Others treat them harshly—perhaps not without cause—sometimes, and punish them severely for disobedience. While I was at Dobbo, a Chinese merchant fastened one of his slave-debtors in a cangue, and kept him there an entire day, chained to the wall of his shop. The man had been caught stealing from his master, and the latter made himself judge, jury, and police-officer without delay.



WEARING THE CANGUE.

The cangue is a wooden collar around the neck; it is about three feet square, and made of planks from one to two inches thick. It is a heavy article of wearing apparel, and not at all ornamental."

Frank asked if the native captains understood navigation after the European form, and could take the positions of the sun and moon with instruments like those used on American or European ships.

"They are not good navigators," responded their informant, "as we understand navigation, but they manage to get along wonderfully well with very rude appliances. They take the altitude of the sun with a stick, to which is attached a string with a peculiar arrangement of knots; and they understand the use of the compass. They have a water-clock, which is very simple, and much more accurate than you would suppose.

"It consists of a bucket of water, and the half of a cocoa-nut shell. There is a tiny hole like the prick of a needle in the bottom of the shell, and when you put it on the water you can just see a stream like a thread spurting up. It takes an hour to fill the shell, and when it is full it goes plump to the bottom of the bucket, making a bubbling noise that attracts



the attention of the man on duty, who immediately puts the shell in place again. I used to try it with my watch, and found that it never varied more than a minute from the hour, which is quite accurate enough for an Oriental. The motion of the boat had no effect on it, as the water in the bucket was always on a level.

"The voyages of these boats are made with the monsoons, so that the course is largely guided by studying the direction of the wind. Only one voyage can be made in a year from Macassar—the boats starting in December or January with the west monsoon, and returning in July or August with the east monsoon. The distance is about a thousand miles, and is made in from twenty to thirty days each way.

"The trade at Dobbo amounts to something near a hundred thousand dollars a year, and is carried on in the most primitive way. It is almost entirely a barter trade; there is no money in use except copper coins from Java and China, and many of the natives do not even know their value. It requires a great deal of talk to make a bargain, and sometimes they will haggle for hours over a transaction that amounts to only a few cents.

"The things brought from the islands, and bought by the traders, are pearl-shells, tortoise-shell, edible birds'-nests, pearls, timber, and birds of paradise. There is also a large supply of *tripang*, or 'beche-de-mer,' of which the Chinese make many soups. It is known in English as the sea-cucumber, and is taken on the reefs and among the rocks all through the Eastern seas, and in some parts of the Pacific Ocean. After being boiled in its own liquid, and dried on racks over a fire, it is ready for market.

"The goods used in purchasing these articles are as varied as the purchasers. The most important item is that of arrack—a spirit distilled from rice, and resembling rum; about twenty thousand gallons of it are sold at Dobbo every year, and sometimes as many as twenty-five thousand. Eng-



A NATIVE OF ARU.

lish and American cottons are sold; and also tobacco, crockery, knives, muskets, gunpowder, Chinese gongs, small cannons, and elephants' tusks. The last three articles are the luxuries with which the natives of Aru buy their wives, and display in their houses or conceal as valuable property. They use tobacco both for chewing and smoking, and will not accept it unless it is very strong. The native pipe is similar to that used in Papua, or New Guinea, and is made of wood, with a long upright handle, which is set in the ground while the owner is using it. He squats before the pipe, and when in this position his mouth is just on a level with the end of the stem.

"I went from Dobbo to Amboyna and Banda, which are small islands not far from the much greater one of Ceram. They formerly belonged to the Portuguese, but are now in possession of the Dutch, and known to the commercial world for their products of cloves and nutmegs."

"I have read somewhere," said Frank, "that the Dutch destroyed the spice-trees on all the other islands, so as to have a monopoly in Banda and Amboyna. Was it not very unjust to the natives to do that?"

"All the facts in the case are not generally known," was the reply. "The Portuguese traders maintained high prices for these luxuries, and used to oppress the natives to obtain them. Sometimes the competition led to their paying such figures to the native princes that the latter became very wealthy, but their subjects were not benefited by them. When the Dutch came into posses-



SEA-CUCUMBER.



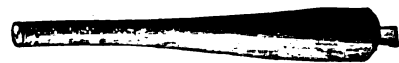
A PAPUAN PIPE.

sion, they determined to concentrate the culture in a few places, so that they could control it, and to this end they offered an annual subsidy to the native princes to destroy the spice-trees in their dominions. The latter were thus made sure of their revenue, while the people were able to devote more time to the cultivation of articles of food, and were relieved from taxes.

"The cultivation of the clove was restricted to the island of Amboyna, while Banda was made the seat of the nutmeg culture. There was so much complaint on the part of the English that the monopoly was finally removed in part; the trade is still surrounded with restrictions, as the Dutch are in possession of the islands where the culture can be conducted to the best advantage. It is a curious circumstance that the birds had much to do with the suppression of the monopoly."

"The birds?"

"Yes, a bird known as the nutmeg-pigeon. He lives on the mace which envelops the nutmeg; the latter is undigested and uninjured in his stomach, and he carries it to islands of whose existence the Dutch were not aware. The nutmeg is the seed of the tree, and as fast as the Dutch suppressed the cultivation in an island the birds restored it. Banda is still the centre of the nutmeg trade, as the article is produced more cheaply there than



SAGO CLUB.



A BIRD OF AMBOYNA.

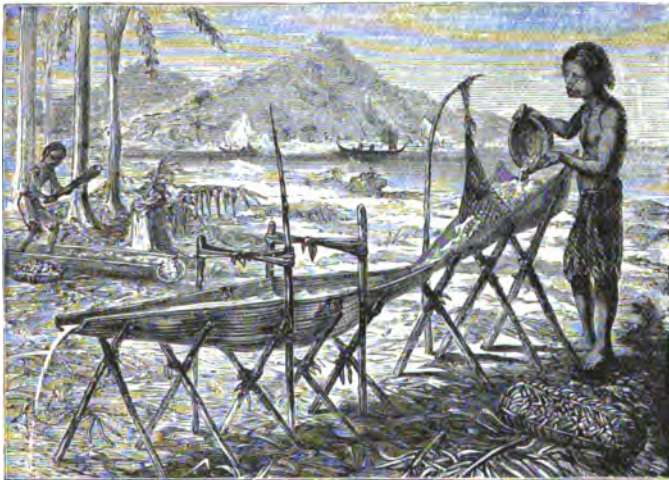
in any other spot, and it sends about two million pounds of this spice to market every year. The climate of Amboyna was found not altogether suited to the production of the clove; and as the clove-tree flourishes in other parts of the world, the monopoly could not be kept up. The clove is not the

fruit of the tree, as many persons suppose, but the blossom; it is gathered before it is unfolded, and if you look at a clove you will see how much it resembles a bud just ready for opening.

"From Banda I went to Cerain, to see the process of obtaining sago. Perhaps you are fond of sago-pudding, and may be interested to know where sago comes from, and how it is prepared."

The boys nodded their assent, and Frank remarked that he had many times wished he knew more about the delicious article.

"The sago-tree belongs to the palm family; it is thicker and larger than the cocoa-palm, but not so tall, and its leaves are very large and long. The stem of the leaf is twelve or fifteen feet long, and six inches in diameter at the butt, and is used for a great many purposes. Whole houses are built of these stems, from the framework to the thatch-poles and



PREPARING SAGO.

flooring, and they never shrink or bend, or require any paint or varnish. The leaf forms an admirable thatch, and the trunk of the tree is the food of many thousands of people.

"When it is about fifteen years old the tree blossoms, and then dies. Just as it is about to blossom, it is cut down close to the ground, and stripped of its leaves. The upper part of the trunk is then taken off, so as to expose the pith of the tree, which is broken into a coarse powder by means of a club of heavy wood, having a piece of iron or sharp stone in one end. The whole inside of the tree is broken up till the trunk forms a trough not more than half an inch thick.

"The dry powder is then washed, and strained through a coarse sieve;

the water flows into a deep trough with a depression in the centre, where the sago sinks to the bottom and is secured. It is then pressed into cyl-



SAGO OVEN.

inders weighing about thirty pounds each, or it is baked into cakes in a clay oven, with a series of compartments an inch wide, and six inches long and deep. The cakes will keep a long while if they are dried in the sun after baking. I have eaten sago that was said to be ten years old, and found it perfectly good."

Fred wished to know how much sago there was in a tree, and how much it costs for a man to live in the sago country.

"A single tree will produce from eight hundred to one thousand pounds of sago," was the reply, "which will support a man for a year. Two men can reduce a tree to dry powder in five days, and therefore we may say that ten days' labor will support a man for a year. The result is



SUGAR-PALM OF MACASSAR.



that in the sago country the people are indolent, and not at all prosperous; they have no incentive to work, and therefore make no effort to do anything. They wear very little clothing; and as for their houses, they have no occasion for anything more than rude huts, which can be built by a couple of men in a few hours. It has been observed by all who have visited Ceram that the inhabitants are not as well off as the people of the islands that produce rice, as the latter must work a great deal harder to support themselves, and will lose their whole crop unless they pay attention to their fields.

“From Ceram I went to Macassar, where they have a palm-tree producing a sweet juice that may be made into beer, or boiled down into sugar, like the sap of a maple-tree. It is not unlike the sago-palm in general appearance, and will grow wherever it can find sufficient soil for its roots. The island is very rough and mountainous, and the variety of soil enables it to produce a great many things. I was invited to stay on the plantation of a friend who lived among the hills, and promised me a pleasant time.

“The road to the plantation was very steep in several places, and the mules that we rode had all they could do to carry us. The path wound



CLIMBING THE MOUNTAIN.

in and out among the rocks, and under the trees peculiar to the tropics: and one of the trees came near being the cause of my falling over a high cliff."

"How was that?"

"Fruit was so abundant that the natives did not gather all of it as fast as it ripened; every little while I saw mangoes or bananas lying in the path, and the incident I mention was caused by my mule stepping on a banana and slipping to the ground. He left me sprawling just on the edge of the cliff; if he had pitched me a foot farther, I should have gone over and been dashed to death on the rocks below.

"I stayed with my friend a week, and found that he had a most delightful residence. He was fond of hunting, and was able to supply his table with meat by means of his gun and dogs. There were many wild pigs in the neighborhood, and he shot two of them while I was there, so that we had pork in abundance. Then there were several kinds of birds that were excellent eating. He had all the milk he wanted from his buffaloes, and made his own butter, raised his own rice and coffee, and smoked cigars from his own tobacco. He had ducks and chickens, and eggs in any desired quantity; his palm-trees supplied him with palm-wine and sugar, and he had nearly every tropical fruit that can be named. You see, by this account of his plantation, how well a man may live in one of the islands of the Archipelago, provided he can reconcile himself to the absence of society, and be contented with the sport that the hilly country affords.

"When I came away my friend accompanied me down the mountain, and I found the journey much easier than going up; in fact, it was too easy, and the mules were inclined to go faster than we liked to have them. A part of the way I hired a boy to hang on to the tail of my beast, which he did, somewhat to the annoyance of the latter. This kind of check was evidently new to him, and he tried to elevate his heels sufficiently to shake off the encumbrance. But he could not do so without danger of turning a somersault; and consequently his kicking was confined to a few slight movements. When the path became less steep I dismissed the boy, and the animal went along as demurely as ever.

"But my time is up," said the gentleman, looking at his watch, "and your note-books are full. I am sorry I have not another hour or two in which to tell you of Celebes, where the Dutch have established the same system of culture that has made Java so prosperous; of Borneo, where the people and the products form a study of unusual interest; of New Guinea, a country rarely visited by Europeans; and of many other parts

of the Eastern Archipelago. Perhaps we will meet again one of these days, and then I will try to give you more information similar to what I have been narrating, and trust you will not find it without interest."

Frank and Fred were earnest in their thanks to their kind informant; and the Doctor added his words of indebtedness to theirs. Expressions of regret at their separation were made on both sides, and the final hand-shaking was the cause of little lumps in youthful and manly throats that choked the voices, and made the "good-byes" a trifle husky in their utterance.

At the stipulated time the repairs to the carriage were completed, and our friends made all haste back to Buitenzorg, and thence to Batavia. At their banker's they found a large parcel of letters, which had just arrived by the last mail from Singapore; and the evening of their return from the interior was devoted to the perusal of the precious missives from home. The next day found them busy with

plans for their future movements, and you may be sure that the map of the eastern hemisphere was thoroughly studied, and the routes of travel and commerce carefully examined. In this occupation we will leave the



COMING DOWN THE MOUNTAIN.

Doctor and his young companions, with the assurance that in due time the Bassett and Bronson families, and all their friends, Miss Effie included, will be fully informed of the adventures that befell

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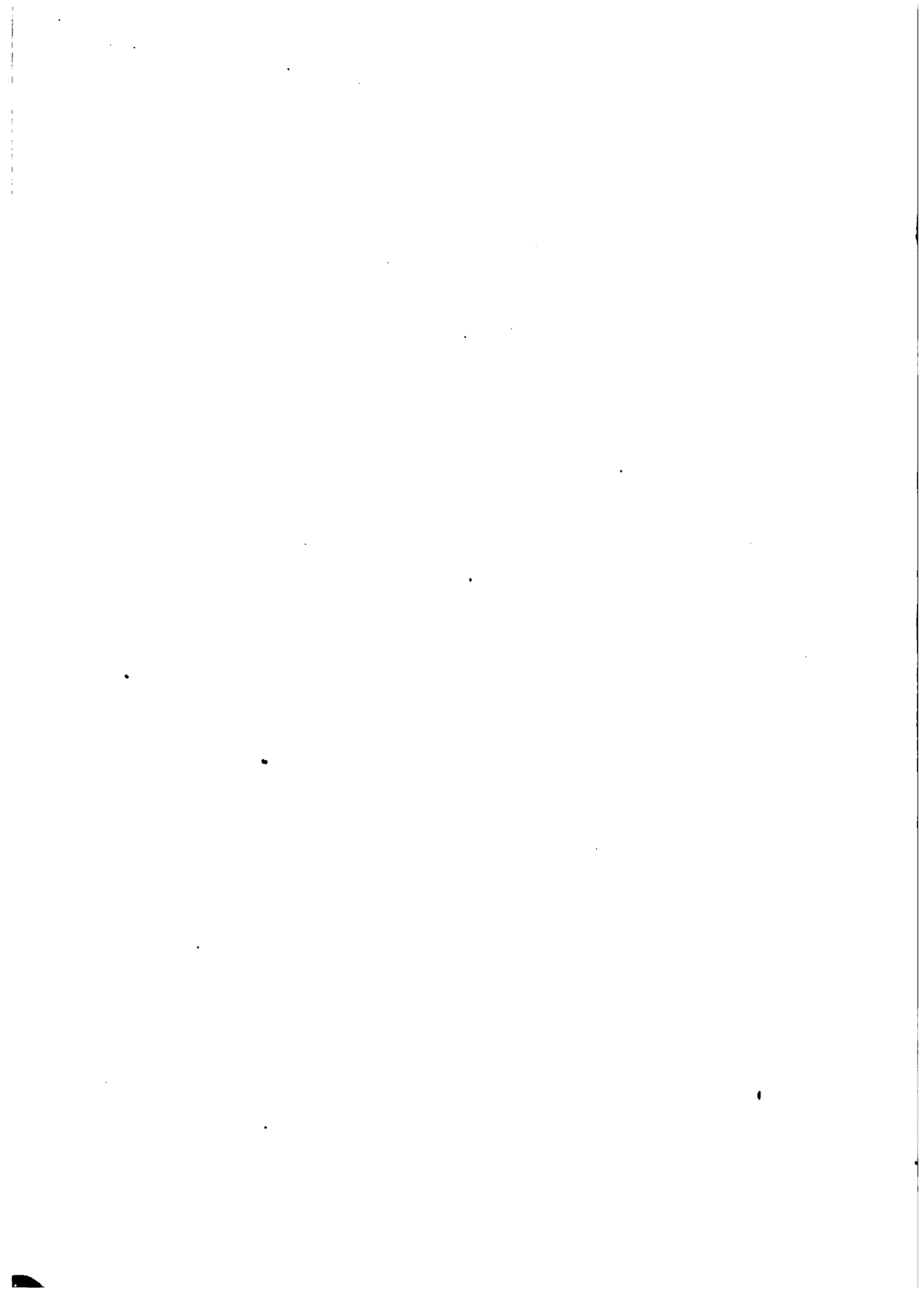
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